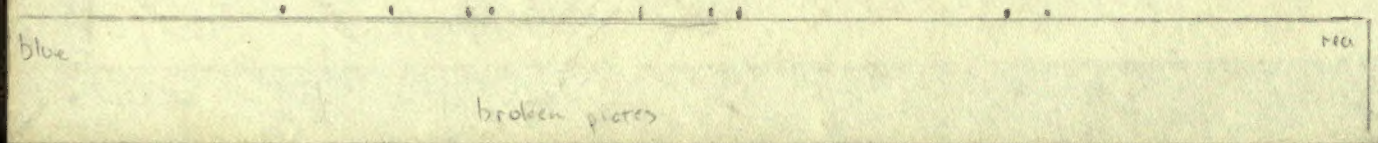
(1)

SM = STEVEN MORRIS - Mor

WTN = MICHAEL WARKENTON



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3

Dome Temp.

Focus

Dome Temp.

Hour Angle End | De

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions ....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality

David Dunlop Observatory
74" logbook
Vol 48
plate no: 39615 – 40589
July 75 – May 76

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* Evacuated 5hrs

Date Jul 29/30 1975 Tues/Wed **Observer** But-Ja **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
39611	HD 116656	13 19.9	+55 24	G12	IIIa-F	9/19	76°F	20:29	20:35	A
39612	HD 186547	19 39.9	+13 04	"	IIa-0-e	131.5		20 49	21 23	B
39613	HD 190658	20 00.9	+15 13	"	"	"		21 31	00:03	C
39613T	Cal step wedge for 39611			180sec	IIIa-Je	D-19@68°F 7 min Aug 2				
39614	HD 186547	19 39.9	+13 04	G12	IIa-0-e	131.5		00:07	00:35	A
39614T	Cal step	wedge	90sec		" for 39612-15					
39615	HD 213947	22 29.9	+26 05	G12	"	131.3		00:44	01 57	C
39616	HD 223094	23 41.5	+28 09	"	IIa-0-e*	131.3		02 09	03 17	A
39616T	Cal step wedge for	39616-17			"	90sec				
39617	HD 218634	23 04.5	+8 08	G12	"	131.5	70°F	03 22	04 02	B

Dome Temp. 77°F H= 7278

Focus 10-B

Dome Temp. 71°F H= 8820

Transparency Conditions Excellent as usual

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
03 23W	+55 08	1"	2.27	A2V	2-2-2	Sp Bin-Hd	40/100		
02 10E	+13 22	1-2"	6.1	B8IV	7-7-7	Sp Bin-Hd	200/80	sheltered (save 2pc)	
00 10W	+15 33	"	6.34	M2III	7-7-7	"	200/190		
01 04W	+13 23	1-2"	6.1	B8IV	7-7-7	Sp Bin-Hd	200/80		
D19 @ 68°F 9mi Avg 1.75									
00 24E	+26 35	1"	8.93	K4III	7-7-7	SSV Hd	800/220		Flexure
00 15E	+28 39	1"	8.97	K5III	7-7-7	"	800/221		
D19 @ 68°F 9mi Avg 1.75									
01 05W	+8 41	1"	6.6	M2III	7-7-7	Wat. Prog.	200/150		

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Date July 30-31 1975 Wed Thurs Observer T.A.-R. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39618	HD 190066	19h 58.1	+21° 52	G-43	IIaO-E	15/.35	80°F	21:51	22:03	A	01h 45E
39619	+27° 3512	19h 42.6	+28° 00	G-43	IIaO-E	15/.35		22:09	23:11	B	00h 24E
39620	+24° 3881	19h 42.8	+24° 36	G-43	IIaO-E	15/.35		23:15	01:32	C	02h 02W
39621	HD 186841	19h 41.7	+23° 50	G-43	IIaO-E	15/.35		01:40	02:36	A	03h 06W
39621T1	cal step wedge				IIaO-E	90 sec	D	19 @ 68°F	9mm Aug 2	75	
39622	HD 186980	19h 42.4	+31° 52	G-43	IIaO-E	15/.35		02:38	03:08	C	03h 37W
39623	HD 23862	03h 43.3	+23° 51	G-12	IIaO-E	9/.7	76°F	03:19	04:03	A	03h 30m E

Dome Temp. 8
Focus 3
Dome Temp. 3

Dome Temp. 84°F 73%

Focus 30B

Dome Temp. 78°F 82%

Transparency Conditions very good

Lt out of Box #5

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality	P.H.
01h 45m E	+22° 11'	2-3"	6.7	B1Ia	2-2-2	Tnr - Vul OB	800/121			A
00h 20m E	+28° 16'	"	9.0	07If	2-2-2	"	800/120	BROKEN 2 PIECES		B
02h 02m W	+24° 55'	"	9.8	07III(f)	2-2-2	"	800/120	HAZY		C
03h 06m W	+24° 11'	"	8.6	B1Ia	222	"	800/120			A
										Aug 2 75
03h 37m W	+32° 10'	"	7.6	O7.5III	2-2-2	"	800/120			C
03h 30m E	+24° 09'		5.1	B8p	7-7-	Gl Shell	20/95			A

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Date Jul 31/Aug 1 1975 - Thur - Fri **Observer** But - Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39624	HD 186547	19h 39.9	+13° 04'	G-12	IIaO-E	13/.5	86°F	20:30	21:10	A	03°45E
39625	HD 154528	17 00.9	+77° 48'	"	"	"		21 20	22:00	C	01°20W
39626	HD 190658	20h 00.9	+15°13	G-12	IIaO-E	13/.5		22:12	00 13	A	00 27W
39627	HD 214946	22 36.7	+44° 29'	"	"	"		00 21	01:15	(B)	01°07E
39627T1	cal step wedge				IIaO-E	D19 @	68°F	9min Aug 2 75			
39628	HD 186547	19h 39.9	+13° 04'	G-12	IIaO-E	13/.5		01:22	01:52	A	02°28W
39629	HD 223094	23h 41.5	+28° 09'	G-12	IIaO-E	13/.3		01:58	03:03	C	00°23E
39630	HD 223311	23 43.4	-6 56	"	"	13/.5	80°F	03:09	04:18	A	00°50W

Dome Temp. 8
Focus 308
Dome Temp. 8

Dome Temp. 88°F 77%

Transparency Conditions good

Focus 3.03

Dome Temp. 84°F 90%

right side of Box #5

ime	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	A	02h15E	+13 22	1"-2"	6.1	B8 IV	7-7-7	Sp-Bi-Hd	200/80		
	C	01h20W	+77 44	"	6.6	A0	7-7-7	"	400/140		
	A	00 27W	+15 34	2"	6.34	M0 III	7-7-7	"	400/385		
	B	01h07E	+44° 58'	1"-2"	7.12	A2	7-7-7	"	400/140		
	A	02h 28W	+13° 24'	1"-2"	6.1	38 IV	7-7-7	"	400/160		
	C	00h 23E	+28° 39'	1"-2"	8.97	K5 III	7-7-7	S.S.V. Hd	800/230		
	A	00h 50W	-06° 22		6.3	gK4	7-7-7	Std Vel.	400/165		

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Date Aug 1-2 Fri/Sat **Observer** Gn - Ri **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39631	HD 141513	15 44.4	-3° 07′	G12	IIIaJ-e	9/.5	8°	20:32	21:04	A	01°35W
39632	HD 147835	16 19.1	+32°34′	"	IIIa-O e	13/.5		21:10	21:43	B	01°44W
39633	HD 157482	17 18.4	+40°04′	"	"	9/.3		21:47	22:14	C	01°15W
39634	HD 161321	17 39.7	+14°27′	"	"	13/.5		22:18	22:50	D	01°4W
39635	HD 190918	20 02.2	+3[illegible]′	"		"		22:57	00:34	B	00°2W
39636	HD 170073	18 22.5	+58°45′	"	IIIaJ-e	"		00:40	01:18	C	03°6W
~~39637~~	~~HD 190412B~~	~~19 54.8~~	~~+33°41.7~~	"	~~IIIaJ-e~~	"		01:23		D	
39637T1	cal step wedge	39631, 35			IIIaJ-E		180 cm · D1				
39637T2	cal step wedge	39637??			IIIa O-E		90 cm				
39637T3	cal step wedge	39632-39636			"		away				
39637	HD 212097	22 16.7	+27° 50′		IIIaJ-E			02:32	03:54	A	01.5W

Dome Temp. 70°F 68%

Focus 80 B

Dome Temp. 84°F 84%

Transparency Conditions hazy

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1	A	01h38W	-03°13'	1-2"	3.50	A0V	22-22-22	Sp Bin Bk	40/70	at right side of box	
3	B	01h44W	+32°30'		6.12	A3V	7-7-7	"	400/140		
4	C	01h15W	+40°05'		5.72	dF8	7-7-7	"	400/110		
50	D	01h40W	+140°34'		5.97	Am	7-7-7	Ecl Bin Bk	400/140		
34	E	00h51W	+35°40'		6.83	WN 4.5 +09.5	7-7-7	Sp Bin Bin	400/221	clouds	
18	F	03h16W	+58°48'		4.93	A1V	22-22-22	"	80/140	right side of Box BROKEN 4 PIECES	
	G				~~6.9~~	~~04F~~	~~7~~	~~"~~	~~400~~/	fairly extensive cloud cupped 01:42 02:00	
		D19 @68°F 7 min Aug 2								right side of Box	
14	H	01 55W	+28° 50		4.83	B8V	22-22-22	Mg2 / Std Star	80/140		

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Date Aug 4-5 1975 ~~Aug 9 1975~~ **Observer** G.a. - R. **Julian Day**

Dome Temp. 15
Focus 24.0
Dome Temp. 7

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39638	HD 151676 ~~157462~~	16 43.7	-15° 30′	G12	IIaO-E	13/1.5	78°F	20 : 29	21:03	A	20°30W
39639	HD 167771	18 11.6	-18° 30′	"	"	"		21 : 12	22 : 04	B	00 20W
39640	HD 161321	17 39.7	+14°27′	"	"	"		22 : 11	22: 39	C	0°30W
39641	HD 164284	17 55.3	+4° 22′	"	IIIaJ-E	"		22 : 44	23 : 05	A	0°30W
39642	HD 170300	18 22.2	+71° 19′	"	"	9/1.5		23 : 12	23 : 33	E	0°45W
39643	HD 80073	9 22.5	+58°45′			1"/1.5		23 : 38	00 : 14	C	0°30W
39644	HD 186209	19h49.0	+46° 46′	"	IIaO-E	9/1.7		00 : 19	00 ; 50	A	0°30W
39645	HD 190918	20 02.2	+35°31′	"	"	13/1.5		01 : 19	02 : 22	B	0°30W
39646T1	cal step wedge		"		IIIaJ-E	13/1.5		180sec			
39646T2	cal step wedge				IIaO-F			90sec			
39646	HD209819	22 01.0	-14°21′		IIIaJ-F	13/1.5		02 28	03 : 06	C	0°30W
39647	HD 212097	22 16.7	+27°50′		"	9/1.5	74°F	03 : 07	04 : 15	A	22°30W
		12									

Dome Temp. 82°F 69%
Focus 20 B
Dome Temp. 74°F 80%

Transparency Conditions ...clear with the odd cloud coming up from the south

Time	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
3	A	20h 50m W	-15° 28'	2"-3"	6.11	A3	7-7-7	Cal Bin Plan	400/140	broken ~3cm 2 pairs	
4	B	00 21 W	-18° 20'		6.52	07 III	7-7-7		400/140	broken 2 pairs	
9	C	01 30 W	+14° 33'		5.77	Am	7-7 7	Cal Bin Plan	400/140		
5	A	01 40 W	+4° 30'		4.84	B2Ve	22-22-22	Sp Bin Plan	40/70	right side of Box	
3	A	01h 45m W	+71° 24'		4.18	Ap Si	22-22-22	"	40/70	right side	
4	A	02 24 W	+58° 48'		4.93	A1 V	22-22-22	"	40/70	right side	
50	A	01h 32m W	+47° 05'	1"-2"	5.6	O9.5 I6 WN4.5f	7-7-7	"	200/100		
22	A	02h 52m W	+35° 40'		7.60	O9.5 Id	7-7 7		400/220		
	A	01h 32m W	-14° 10'		4.18	B8 V	22-22-22	"	40/70		
M	A	02h 28m W	+25° 20'		4.83	B6 V	22-22-	Cal Bin Plan	40/67	clouds	

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Date Aug 7-8/75 Thurs-Fri **Observer** But-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39648	HD 186547	19 39.9	+13 04	G12	IIa-0-c	131.5	70°F	20:19	20:58	A	0.7 E
39648T	Cal step wedge		90sec		"	Dew	Hg	8 D.I	9min		
39649	HD 190658	20 00.9	+15 13	G12	"	131.5		21:04	23 28	B	00 6W
39650	HD 217675	22 57.3	+41 47	G12	IIIa-J-e	91.9		23:37	23:58	C	00 4E
39650T	Cal step wedge		180sec		"	Dew	Ag	D19	7min		
39651	HD 219634	23 12.2	+61 25	G12	IIa-0-e	131.5		00 08	00 35	A	0 5E
39652	HD 186547	19 39.9	+13 04	"	"	"		00:52	01 41	C	00 4W
39653	HD 218634	23 04.5	+ 8° 08	"	"	"		01 49	03 03	A	00 1W
39654	HD 216114	22 48.2	-12 09	G12	IIIa-J-e	131.5		03 09	03.40	B	0 3W
39655	HD 225209	23 57.1	+60 45	"	"	"		0345	04:02	C	00 4W
39656	HD 217675	22 57.3	+42 11	"	IIIa-J-e	91.9	64°F	04 09	04:28	B	02 3W

Dome Temp. 6
Focus 0
Dome Temp. 6

Dome Temp. 69°F H: 66%

Focus 0

Dome Temp. 63°F H: 82%

Transparency Conditions Excellent

Aurora Low in North mist-tonight

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02 00 E	+13 21	3"-5"	6.1	B8 IV	7-7-7	Sp Bin - Hd	200/80		
00 10 W	+15 34	2"-4"	6.39	M2 III	7-7-7	Sp Bin Hd	"/390		
02 16 E	+42 16		3.63	B6p	22-22-22	Shell	40/130		
01 53 E	+61 53		.7??	B8	7-7-7	Sp Bin. Hd	400/160		
02 44 W	+13 23	3-5	6.1	B8 IV	7-7-7	"	200/80		
00 42 W	+8 41	3-5	6.6	M2 III	7-7-7	Wat. Prog.	200/170		
01 35 W	-11 37	4-6	5-9	B9 V	7-7-7	Sp. Bin Hd	200/70		
00 44 W	+61 14	3"-5"	5.9	B7 III	7-7-7	"	200/75		
02 13 W	+42 17'	2-3	3.63	B6p	22-22-22	Shell Bin	40"/110		

17 Aug #1

Date Aug 8-9 '75 Fri-Sat **Observer** Lee-Tu **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39657	HD 149681	16 32.4	14 40	G12	IIa-O2	13/1.5	75°F	20:21	21:00	A	01 14W
39658	HD 155423	19 33.8	3 09	"	"	"		21:06	21:36	B	01 11E
39659	HD 149881	16 32.4	+14 40	"	"	"		21:42	22:15	C	02 29W
39659T	Cal step	wedge	90sec		"						
~~—~~	~~HD 205021~~	~~21 27.4~~	~~+70 07~~	~~G12~~	~~"~~	~~9/.7~~		~~22:31~~	~~22:22~~	~~A~~	
39660	HD 205021	21 27.4	+70 07	G12	IIa-O-e	9/.7		22:28	22:32.5	A	02 4E
39661	"	"	"	"	"	"		22:34	22:38	C	02 1E
39662	"	"	"	"	"	"		22:42	22:45	A	01 3E
39663	"	"	"	"	"	"		22:53	22:58	B	01 4E
39664	"	"	"	"	"	"		23:04	23:08.5	C	01 7E
39665	"	"	"	"	"	"		23:10	23:14	A	01 3E
39666	"	"	"	"	"	"		23:19	23:23	B	01 1E
39667	"	"	"	"	"	"		23:34	23:37	C	01 0E
39668	"	"	"	"	"	"		23:41	23:44.5	A	00 5E
39669	"	"	"	"	"	"		23:50	23:54.5	B	00 4E
39670	"	"	"	"	"	"		23:58	00:03	C	00 3E

Dome Temp.
Focus 12-
Dome Temp.

Dome Temp. 76°F / 56°D

Focus 12-B

Dome Temp. .....

Transparency Conditions Excellent

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
30	A	01 14W	1440	1-2"	6.59	B2V	7-7-7	B Cyclic	200/70		
26	A	01 11E	3 27	2"	6.36	B4	7-7-7	"	200/70	Low reading to [illegible]	
5	C	02 29W	14 40	2-3"	6.59	B2V	7-7-7	"	200/60		
2	A		70 30		2.93	B2 III	12-12	[illegible] Cyn A	40/19	Shuttered	
3.5	A	02 06E	70 30	2"	2.93	B2 III	12-12	B Ceph	40/18		
9	C	0200E					12-12	"	40/18	3 possible mixup	
5	A	01 53E					12-12	"	40/20		
58	A	01 40E					12-12	"	40/26	(Also - pulley capping loose	
09.5	C	01 29E		1-2"			12-12	"	40/18	fouling up - may have	
14	A	01 23E		"			12-12	"	40/18	rotated and [illegible]	
23	A	01 16E		"			12-12	"	40/20	Elim. noted pulley [illegible]	
37	C	01 02E					12-12	"	40/21	(Taking out [illegible])	
14.5	A	00 54E	7030	2-3			12-12	"	40/19		
9.5	A	00 43E					12-12	"	40/21		
53	C	00 36E					12-12		40/18		

19 Pg #2

New Batch

Date Aug 8-9/75 Fri-Sat Observer Lne - Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39671	HD 205021	21 27.4	70 07	612	IIa-0e	91.7		009.5	00 13	A	16 20 E
39672	"	"	"	"	IIa-0-e*	"		0020	00:24	B	15E
39673	"	"	"	"	"	"		00:27	00:30	C	9E
39674	"	"	"	"	"	"		00:35	00:39	A	6E
39675	"	"	"	"	"	"		00:41	00:45	B	4W
39676	"	"	"	"	"	"		00:51	00:56	C	17W
39677	"	"	"	"	"	"		01:02	01:06	A	27W
39678	"	"	"	"	"	"		01:12	01:16.5	B	39W
39679	"	"	"	"	"	"		01:26	01:29.5	C	51W
39680	"	"	"	"	"	"		01:35	01:37.5	A	59W
39681	"	"	"	"	"	"		01:44	01:47.5	B	1:09W
39682	"	"	"	"	"	"		01:57	02:01	C	1:19W
39683	"	"	"	"	"	"		02:05	02:09	A	1:33W
39684	"	"	"	"	"	"		02:13	02:17	B	1:40W
39685	"	"	"	"	"	"		02:22	02:26.5	A	1:50W
39686	"	"	"	"	"	"		02:30	02:32	B	1:56W

Dome Temp.
Focus
Dome Temp.

Dome Temp. 64° F H·82%

Transparency Conditions Photometric

Focus .....

Dome Temp. .....

overs, there's more

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0026E	70 30		293	B2 III	12-12	β Cephei	40/20		
0015E	"		"	"	12-12	"	40/20		
0009E	"		"	"	12-12	"	40/20		
0000	70 30		"	"	12-12	"	40/18		
0006W	"		"	"	12-12	"	40/18	broken lpc	
0017W	"		"	"	12-12	"	40/18		
0027W	"		"	"	12-12	"	40/19		
0038W	"		"	"	12-12	"	40/18		
0051W	"		"	"	12-12	"	40/18		
0059W	"		"	"	12-12	"	40/18		
0109W	"		"	"	12-12	"	40/20	broken at one end	
0124W	"		"	"	12-12	"	40/20		
0132W	"		"	"	12-12	"	40/25		
0140W	"		"	"	12-12	"	40/20		
0150W	"		"	"	12-12	"	40/19		
0156W	"		"	"	12-12	"	40/18		

21 pg #3

Date Aug 8-9/75 Fri-Sat Observer Lee-Tm Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39687	HD205021	21 27.4	70 07	61Z	IIa-O*	9/.7		02:37	02:41	A	
39688	"	"	"	"	"	"		02:45	02:48.5	A	
39689	"	"	"	"	"	"		02:52	02:55.5	B	
39690	"	"	"	"	"	"		03:00	03:04	C	
39690T1	Cal step	wedge	for New Batch							A	
39690T2	" "	"	"	"							

Dome Temp.
Focus
Dome Temp.

Dome Temp. 65°F H=91%

Transparency Conditions .....

Focus .....

Dome Temp. .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02 05W	70 30	2'	2.93	B2II	12-12	β Cephei	40/25	broken & filters	
02 13W	"		"	"	12-12	"	40/20		
02 20W	"		"	"	12-12	"	40/19		
02 29W	"		"	"	12-12	"	40/18		
} put at far right of Box #6							Du Mg II D19 (8mm 9m		

23

2 visitor groups

Tried TV guiding.

Dome Temp. 75
Focus 12-4
Dome Temp. 71

Date Aug 9-10, 1975 Sat Sun **Observer** BK - Tn (Re) **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39691	HD 175588	18 51·0	+26 47	G 12	IIa-O	131.5		22 44	00:00	A	02 00W
39691 T	Cal step	wedge		90sec	"						
39692	HD 187849	19 47·0	+38 27	"	"	"		00:10	01:54	B	02 58 W

Dome Temp. 78°F H= 78%
Focus 12-B
Dome Temp. 77°F H= 82%

Transparency Conditions Hazy to cloudy

Ending Time EST	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
[illegible] 30	A	02 00W		2-3?	5.9	M4 III	7-7-7	Waterloo	200/240	TV-guided (1st of DDO)	Poor
			Dec Diff 8min Avg 11 68°F at 01^h								
[illegible]		02 58 W	+38 45	2"	6.0	M2 III	7-14	Waterloo	400/160	TV guided - cloud	Several

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Date Aug 10-11, 1975 Sun/Mon Observer Fgin/Tm Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39693	HD 190918	20h 2.2m	+35° 31′	G12	IIaOc	13/.5	78°	20:25	21:55	B	.01 12E
39693T	Cal step	wedge	90sec		"						

Dome Temp. 82°F H=82%

Focus 12-B

Dome Temp. 80° H=90%

Transparency Conditions HAZY WITH CLOUDS

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ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
55	B	1 01 12E	+35 49	2"	6.82	WN 4.5 + 09.5	7-27	Fe Thesis	400/216	Cloud - Lightning	
			Dec D19	9mm @		68°F	Ag 11				

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* Just out of Frig
** new batch IIa-Oe

Date Aug 11/12 Mon-Tues Observer Tn - Gn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39694	HD 37569	15 21.7	+15° 03′	G12	IIaO-E	131.7	76°	20:16	21:02	A	
39694T	Cal step	wedge	90sec		"	for	39694				
39695	HD217675	22 57.3	+41 47	G16	IIaF *	91.5	72°F	01:17	01:47	A	0011E
39696	"	"	"	"	"	"	"	01:48	02:24	B	0026W
39696T	Cal step	wedge	5min		"						
39697	HD217675	22 57.3	+41 47	G12	IIIa-J-e	91.7		02:33	02:51	C	0052W
39697T	Cal step	wedge	180sec		"						
39698	HD217675	22 57.3	+41 47	G12	"	91.9		02:52	03:16	A	0117W
39699	HD19622	02 16.6	+40 57	"	IIa-O-e **	131.5		03:24	03:49	B	0136E
39699T	Cal step	wedge	90sec		"						
39700	HD15130	02 21.1	-12 44	G12	"	131.5		03:53	04:08	C	0114E

Dome Temp.
Focus
Dome Temp.

Dome Temp. 77°F H=78%
Focus 10-B
Dome Temp. 67°F H=80%

Transparency Conditions hazy

A Few good meteors (Perseids)

ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
:12	A	02h38 W	+14 54	2-3'	8.10	B5 III	7-10	Sp Em Dem	800/65	clouds } * Push (at left) * Heavily	
:27	A	00 11 E	+42 16	3-4	3.63	B6p	no filter 3-4-3	Shell *	40/120	hazy - some cloud } in middle of Box	
2:28	B	00 26 W	"	2-3	"	"	3-4-4	"	40/135		
2:51	C	00 52 W	"	2"	3.63	B6p	22-22-22	Shell *	40/60	may be fogged } At Far Right of Box	
:16	A	01 17 W		2-4"	3.63	B6p	22-22-22	Shell *	40/100		
1:49	C	01 30 E	+41 22	3-4"	Cv15	F0	7-7-7	Accident	400/140	wrong star - should be HD 4622	
1:57	C	01 14 E	-12 16	3-6"	4.85	B9V	7-7-7	Spec 6h	200/70		

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Date Aug 12/13 Tues/Wed 75 **Observer** Bud - Tom **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39701	HD186547	19 39.9	+ 13 04	G12	IIIa-0e	131.5	77°F	20:12	20:40	A	01:58E
39702	HD190658	20 00.9	+15 13	"	"	"		20:42	23:20	B	00:24W
39702T	Cal step	wedge	90sec		"						
39703	HD217675	22 57.3	+41 47	G12	IIIa-e	91.9		23:24	23:52	C	02:02E
39703T	Cal step	wedge	180sec		"						
39703F	Focus			G12	IIaO	13	75°F			B	
39704	HD219634	23 12.2	+61 25	"	IIIa-0-e	131.5		00:13	00:52	B	01:17E
39705	HD 438	0 41.1	+30 25	"	"	131.3		01:05	03:21	C	04:35E

Dome Temp. +78° H: 72%

Focus 10-B

Dome Temp. .....

Transparency Conditions Good some haze, thin cirrus

Saw a few Perseids only after 0^h

ng Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
.40	A	01 58E	+13° 22'	1"	6.1	B8 IV	7-7-7	Sp Bin-Hd	200/80		
20	B	00 22W	+15 33	1-2"	6.34	M2 III	7-7-7	"	200/200		
52	C	02 02E	+42 17	1-½"	3.63	B6p	22-22-22	Shell *	40/100	cloud	
	E		in/out ext				5/5	no filter			
	F	01 17E	+61 54	2-3	7.0?	B8	7-7-7	Sp Bin-Hd	400/165	some cloud - Kp+ Hen 70	
	C	00 5E	+3 55	3"	8.8	K3 V	7-7-7	SSV HJ	800/224	thin cloud	

31 pg #1

Date August 13/14 Wed-Thurs **Observer** Tm Gm **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39706	HD 116656	13 19.9	+55° 27	G12	IIIa-J e	9/.9	75°F	20:35	20:43	A	
39707	MD 149881		+14 4	"	IIaO-E	13/.5		20:52	21:36	B	
39707T1	Cal step wedge		90sec		"	for 39707-					
39707T2	Cal step wedge		180sec		IIIa-J e	for 39706					
39708	HD 170000	18 22.2	+71 17	G12	IIIa-J e	91.5		21:42	22:08	C	
39709	HD [illegible]		+29 43	"	IIaO	13/.5		22:16	22:21	A	
39710								22:26	22:32.5	B	
39711								22:34	22:40	C	
39712								22:44	22:50	A	
39713								22:53	22:59	B	
39714								23:04	23:10	C	
39715								23:14	23:19.5	A	
39716								23:26	23:32	B	
39717								23:36	23:43	C	
39718								23:48	23:54.5	A	
39719								00:02	00:08	B	

Dome Temp.
Focus 16
Dome Temp.

Dome Temp. 80°F ... H. 87%

Focus 10-B

Dome Temp. .....

Transparency Conditions Hazy ... Excellent by 23h, 29 Aug

ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
-	A	04h 28W		2"	2.27	A2 V	22-22-22	A 225 *	40/100	uneven guiding ?	fair cirrus
		02h 10W	+14 41	2-3	6.59	B2 V	7-7-7	β Cygni	40/140	* } At right of Fov	fair
		Dew	Hy 14 DIS	9 mi	68F					* } in 145° 72 — 19	
		"	" "	7 mi	"						
	C	00 56W	+71° 24'	2-3"	2.18	ApSi	22-22-22	[illegible]	40/70	some cloud in north	pr wk
1	A	03 10E	+40° 10'	1"-2"	3.02	[illegible]	2-14	β Cygni	[illegible] 50		fair
		02 58E		"			12-12	"	[illegible] 60	night turned	fair cirrus guiding
	G	02h 51E					12-12	"	40/60		fair
		02 41E					12-12	"	40/60		fair
		02 32E		3"			12-12	"	40/60		fair
	C	02 21E					12-12	"	40/60		fair
		02 11E					12-12	"	40/60		fair
		01 58E		2-3			12-12	"	40/60		fair
42	C	01 47E		"			12-12	"	40/60		fair
45	A	01 46E ?		"			12-12		40/60		fair
	B	01 22E					12-12		40/60		fair

33P/ #2

* Evacuated only for 1-3 hrs
** Evacuated for 3 hrs

Date ..... **Observer** ..... **Julian Day** .....

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39720	HD 214993	22 37.0	+39 43	G12	IIa-O*	131.5		00:13	00:20	A	
39720T	Cal. star	edge	98:cc								
39721	HD 214993	22 37.0	+39 43	G12		131.5		00:23	00:29	B	
39722								00:34	00:41		
39723	"							00:47	00:53	B	
39724								00:58	01:07	A	
39725							72°	01:07	01:14	B	
39726								01:17	01:24	C	
39727								01:28	01:34	A	
39728								01:47	01:53	C	
39729								01:55	02:02.5	A	
39730								02:05	02:12	B	
39731					I-C-E**			02:16	02:22	C	
39732								02:25	02:31.5	A	
39733								02:37	02:44	B	
39734								02:47	02:54	C	

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions ..... Excellent .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 10E			5.10	B2III	13-13	4 Cephei	40/70	In 2-1 Box	fair
	Dew Aug 14	D19	9 min @ 68°F						
01 01E			5.1	B2III	13-13	4 Cephei	40/70		fair
00 49E					13-13		40/70		fair
00 37E					12-12		40/60		fair
00 27E					13-13		40/70		fair
00 16E					13-13		40/74		fair
00 06E		2-3			13-13		40/71		fair
00 04W					13-13		40/73		fair
00 23W					13-13		40/70		fair
00 33W					13-13		40/70		fair
00 43W					13-13		40/70		fair
00 53W					12-12		40/60		fair
00 02W					12-12		40/60		fair
00 14W					12-13		40/60		fair
00 24W					12-12		40/60		fair

3rd Pg #3

Date.....**Observer**.....**Julian Day**.....

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39735	HD 214993	[illegible]	[illegible]	[illegible]	103O** e	13/.5		02:54.5	03:[illegible]	A	11.35W
39736	HD [illegible]	[illegible]	[illegible]	"	[illegible] e	9/.9		03:09	03:28	A	11.30W
39734 T	Cu strip	4 edge	90 sec		Ha-D-e**	[illegible]	for	39731 -	35		
39737	HD 212657	22 50.3	+41 47	G16	Do F e	9/.5		03:35	03:58	B	11.09W
39738 T	Cu strip	edge	5 min		"						Dk Ag

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions Excellent

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 33W		2-4"	3-10	B3	12-12	β Cephei	40/100		fair
01 38W		2-3	3.63	B6p	22-22-22	Shell *	40/100	*Put to West of Pier*	fair guiding
Dew	Aug 14 D19	9 min	@ 68°F						
0208W			3.62	B6p	no 2-1-4 3-3-4	Shell *	40/100		fair
Dew Aug 14	D19	5 min	@ 68°F						

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Date August 15/16 first **Observer** Tr. Gm **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
39738	MD21675	22 57 3	+41° 47′	913	Tri-X	1/9		23:22	23:51	A
39739	Cal. std.	adjo	15 Sec.		"			"		

Dome Temp.
Focus
Dome Temp.

Hour Angle End
01+E
24

Dome Temp. 70°F H 96 %

Transparency Conditions [illegible]

Focus 10-B

Dome Temp. .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 51 E	+42° 16′	2-3	3.63	B6p	22-22-22	[illegible]	40/100	[illegible]	
Dew	Ag 18	D19	7 mi	@ 67°F					

59 1 Tour 2 hrs Aug 16-17

Date Aug 17-18 Sun Mon 135 Observer Fqi-Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
39739	HD 190918	20h 2.2	+35° 31'	G12	IIaDe	18/1.5	75°F	20:08	21:22	A
39739T	Cal sky	wedge	90sec		"					
39740	BD+35°3955	20 2.2	+35 31	G12	"	18/1.5		21:26	22:53	B
39741	HD 190864	20 2.2	+35 21	"	"	"		23:00	00:36	C
39742	BD+35°3956	20 2.2	+35 31	"	"	18/.3		00:37	03:12	A
39743	HD 212097	22 16.7	+28 12	"	IIIaJ	9/1.5		03:25	04:16	B
39743T	Cal sky	wedge	180sec		"					

Dome Temp.
Focus
Dome Temp.

Dome Temp. 78°F 1:59Z

Focus 10-B

Dome Temp. .....

Transparency Conditions .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 17E	+35 49	2-3	6.83	NN4 +09	2-5-5	Fg Thesis	400/235	#1	
Dew Ay	18 D19	9mm	67°F						
00 13W	+35 51	3-2	7.31	B1	6-6-6	"	400/180	#3 windy	
01 57W		3-3	7.76	B1	6-6-6	"	400/180	#4 shifted 1/2 mm of	
4:37W		2-4	8.84	B1	6-6-6	"	300/183	#7 broken 2 pieces	
3:25W		3-5	7.83	PYI	2-2222	Algol comp*	40/60		
Dew Ay 18 D19		7mm	67°F						

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Date Aug 16/19 Monday-Tuesday Observer Tm Gn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39744	HD 116656	13h 19m.9	+55° 27′	G 12	IIIaJ-e	9/.9	69°	19:54	19:59	A	04° 06W
39744T	Cal step wedge		180sec		"						
39745	HD 137569	15h 21m.7	+15° 03′	"	IIIaO e	13/.3		20:10	21:53	B	00° 34W
39745T	Cal step wedge		90sec		"						
39746	HD 212097	22h 16m.7	+27° 50′	G12	IIIa-J-e	9/.5		21:58	22:48	A	02½E
39747	"	"	"	G16	IIaF-e*	"		22:57	23:23	A	01 28E
39747T	Cal step wedge		5 min		"						
39748	HD 212097	22 16.7	+27 50	G16	"	9/.5		23 23	00:28	B	00 33E
39748T	Cal step wedge		5min		"						
39749	HD 217675	23 57.3	+41°47′	"	"	"		00:31	00:52	A	00 39E
39750	"	"	"	G12	IIIa-J-e	9/.9	63°F	01:01	01:18	B	00 13E
39751	HDE 235679	21 55.0	+54°01′	"	IIIaO-e	18/.3		01:30	04:[illegible]	A	13 52W
39752	HD 15130	2 21.1	−12°44′	4	IIIaJ-e	13/.5		04:23	04:49	B	00 05E

Done Temp. 6
Focus 0
Done Temp. 5

Dome Temp. 66°F H. 60%

Focus 0-

Dome Temp. 53°F H. 92%

Transparency Conditions clear (some cloud)

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
04h 06W	+55 08	2"	2.27	A2V	22-22-22	A 225 *	40/100		
Dw Aug 19 D19		1 mm	@ 65°F						
03h 57W	+14 53	2-4'	8.10	B5III	7-7-7	Sp Bin Blen	400/101	some cloud	
Dw Aug 19 D19		9 mm	@ 66°F						
0202E	+28 18	2-4	4.83	B8V	22-22-22 no filter	Algol Std *	40/60	maybe incorrectly labeled "45"	
0128E	"	"	"	"	3-5	"	40/30	*S1 suspicion ph-e maybe IIaO *c	
Dw Aug 19 D19		5 mm	@ 65°F						
0022E	"	4-2"	4.83	B8V	3-4-3	Algol Std	40/100	(All IIaEs at Eq right of Er Box	
Dw Aug 19 D19		5 mm	@ 64°F						
0039E	+42 17	2-3	3.63	B6p	3-3-4	Shell *	40/100		
0013E		"	"	"	22-22-22	"	40/100		
0350W	+54 28	2-4	9.21	B2.5IV	6-22	Sp Bin Blen	800/240	Bad Fld; one frame	
0005E	-12° 17'	"	4.85	B9V	22-22	"	40/40	well into dawn	

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* New batch IIa-0e

Date Aug 19/20 Tues/Wed 75 **Observer** But-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39753	HD 116656	13 19.9	+55 27'	G12	IIIa-J	91.9	65°F	19:54	19:57	A	0.09 W
39754	HD 116657	"	"	"	"	91.5		20:00	20:11	B	
39754T	Cal step wedge		180sec		"						
39755	HD 186547	19 39.9	+13 04	G12	IIa-0e	131.5		20:17	20 45	A	01 25 E
39756	HD 199071	20 18.5	+27 55	"	"	131.4		20:49	23 20	B	00 32 W
39756T											
39757	HD 219634	23 12.2	+61° 25'	"	"	131.5		23 25	00:04	C	01 37 E
39758	HD 186547	19 39.9	+13 04	"	"	"		00:15	00:43	A	02 38 W
39759	HD 213997	22 29.9	+26 05	"	"	131.3		00:50	02:18	B	01 18 W
39760	HD 218634	23 04.5	+8° 08'	"	IIa-0e*	131.5	59°F	02:23	03:30	C	01 55 W
39760T	Cal step wedge		90sec		"						

Done Temp.
Focus 12
Done Temp.

Dome Temp. 63°F H=69%

Focus 12-R

Dome Temp. 58°F H=78%

Transparency Conditions very good - 11.0 cirrus

ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	A	04 09W	+55 10'	2'	2.27	A2 V	22-44	A225 *	40/76		
:11	B			2-3	3.8	A2	22-22-	Asp Sp KA	40/50		
		Alyzo	Dew 7mm	D19	@ 65°F						
:5	A	01 25 E	+13 23	2-3	6.1	B8 IV	7-7-7	Sp Bin-Hd	200/80		
	P	00 32W	+28 15	2-3	9.06	G8 III	7-7-7	S S V Hd	800/316	thin cloud	
		Alyzo	Dew 9mm	D19	@ 66°F						
:14	C	01 37E	+61 54	3-4	7.0?	B8	7-7-7	Sp Bin Hd	400/160	cloud	
:41	A	02 38W	+13 23	4	6.1	B8 IV	7-7-7	"	200/80		
:47	P	01 18W	+26 34	1-3'	8.93	K4 III	7-7-7	S S V - Hd	800/350		
:0	C	01 55W	+8° 42'	2-3	6.6	M2 III	7-7-7	Wot. Prog.	200/165	C/O ends	

45 #1

Date Aug 20/21. Wed-Thurs **Observer** Lee - Ri **Julian Day**

Dome Temp.
Focus c
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle East
39761	HD 170000	18 22 2	71 17	G12	IIaJe	9|.5	70°	20:05	20 34	A	0°1E
39762	HD 195556	2026.9	48 37	G12	IIaO	9|.5		20:49	20:58	B	0°5E
39763	HD 149881	1632.4	14 40	G12	IIaO	13|.5		21:09	21:56	C	0°7.5W
39764	HD 199661	2053.5	56 30	"	"	13|.5		22:04	22:25	A	0°5E
39765	HD 195556	2026.9	48 37	"	"	9|.5		22:30	22:38	B	0°1E
39766	HD 190918	20 07.2	35 31	"	"	13|.5		22.45	23:31	C	1°2W
39766+1	cal step wedge for plate 39761				IIIaJ-E	180 sec		Dev 7 min			
3976612	cal step wedge for plate 39762 - 39772				IIaO-E	90 sec		" 9 min			
39767	HD 199661	2053.5	56 30	"	"	13|.5		23:37	23:50	A	0°3W
39768	HD 195556	2026.9	48 37	"	"	9|.5		23:56	00:05	B	0°1.4W
39769	HD 199661	2053.5	56 30	"	"	13|.5		00:14	00:30	C	0°7W
39770	HD 195556	2026.9	48 37	"	"	9|.5		00:34.5	00:45	A	0°5.5W
39771	HD 199661	2053.5	56 30	"	"			00:50	01:09	B	0°5E
39772	HD 886	0028.1	14 38	"	"	9|.9		01:19	01:22	C	0°1.5E
39773	"	"	"	"	"	"		01:25	01:28	A	0°3.5E
39774	"	"	"	"	"	"		01:29.5	01:33	B	0°2E

Dome Temp. 68°F 60%

Transparency Conditions ... attend clouds I fair then good

Focus ... 0

Dome Temp. ...

What happen to the flashlight

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
04h11E	+71°23	3	4.18	KOS1	22-22 22	Sp. Bin-Blu	40/70	clouds north side Ref #2	fair
01h54E	+48°55'	3	4.94	B2V	7 7 7	β Cephei	20/70		fair
02h58W	+14°39	3	6.59	B2V	7-77	"	400/140		fair
00h54E	+56°53'	3	6.23	B3	7 7 7	"	400/140	" BROKEN 2 pieces	
00h15E	+48°58'	3	4.94	B2V	7-77	"	200/70.		fair
04h05W	+35°50'	3	6.83	WN4.5 +09	7 7 7	Eqi-Hesi	400/220		
								north side of Ref #2	
00h32W	+56°53	3	6.23	B3	7-77	β Cephei	400/140		fair
01h14W	+48°57	3	4.94	B2V	7-77	"	200/70		fair
01h11W	+56°53	3	6.23	B3	7-77	"	200/70		fair
01h54W	+48°57		4.94	B2V	7-77	"	200/70		Several of fair
01h50	+56°53'		6.23	B3	7 7 7	"	200/70		fair
01h11E	15° 10		7.83	B2 IV	7-14	"	30/15		fair
01h06E	"		"	"	10-10	"	20/15		"
01h01E	"		"	"	11-10	"	20/15		"

UT
#2

* New Batch

Date Aug 2021 Wed/Thurs **Observer** Che-Ri **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39775	HD886	00 8.1	14 38	612	IIaOe	9/.9		01:35	01:38	C	00°56E
39776	"	"	"	"	"	"		01:41	01:44	A	00°51E
39777	"	"	"	"	"	"		01:45.5	01:48	B	00°46E
39778	"	"	"	"	"	"		01:55	01:58	C	00°36E
39779	"	"	"	"	"	"		02:05	02:11.5	A	00°23E
39780	"	"	"	"	"	"		02:16	02:21	B	00°12E
39781	"	"	"	"	"	"		02:29	02:33	C	00°01E
39783	"	"	"	"	"	"		02:41	02:48	A	00°14W
39783?1	cal strip wedge	for plates 39773 - 39783			IIaOE						
39784	HD 886	00 8.1	14 38	G-12	IIaOE	9/.9		02:52	03:56	B	00°30W
39785	"	"	"	"	"	"		03:04	03:08	C	00°43W
39786	"	"	"	"	"	"		03:12	03:17.5	A	00°44W
39787	"	"	"	"	"	"		03:20	03:23	B	00°50W
39788	"	"	"	"	"	"		03:28	03:32.5	C	00°59W
39789	"	"	"	"	"	"		03:35	03:38	A	01°05W
39790	"	"	"	"	"	"		03:43	03:47	B	01°12W

Dome Temp. .....
Focus .....
Dome Temp. .....

Transparency Conditions .....

...ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
.33	C	00h56E	15°10		2.83	B2IV	10-10	Cepheii	20/15		sunlit strong
44	A	00h51E	"	"	"	"	10-10	"	20/15		"
.44	B	00h46E	"	"	"	"	10-10	"	20/15		"
53	C	00h36E	"	"	"	"	12-12	"	20/15	BROKEN 2 Pairs	"
.5	F	00h23E	"	"	"	"	12-12	"	20/15	broken + stuck in exposure box + lost	"
.1	B	00h13E	"	"	"	"	12-12	"	20/15	was in numb. in book time of plate should be correct.	"
.13	C	00h01E	"	"	"	"	12-12	"	20/15		"
.4	F	00h14W	"	"	"	"	12-12	"	20/15		"
3 56	F	00h23W	"	"	2.83	B2IV	12-12	"	20/15	exposed Box #2	
3.08	C	00h35W	"	"	"	"	12-12	"	20/15		"
.2	A	00h44W	"	"	"	"	12-12	"	20/15		"
03.23	B	00h50W	"	"	"	"	12-12	"	20/15		"
.95	C	00h59W	"	"	"	"	12-12	"	20/15		sunlit strong
3.36	F	01h05W	"	"	"	"	12-12	"	20/15		"
3.42	B	01h13W	"	"	"	"	12-12	"	20/15		"

49 #3

Date Aug 20-21 Wed Thurs Observer He-Li Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39791	HD 886	00h09.1	+14°38	G-12	IIa-F	9/9		03:50	03:54	C	
39792	"	"	"	"	"	"		03:57	04:01	A1	
39793	"	"	"	"	"	"	64°F	04:04	04:14.5	B	
39793.1	cal alp vir	39754									

Dome Temp.
Focus
Dome Temp.

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01h 30W	+15°10'		2·83	B2 III	12-12	B Caplan	20/15		5 (cm)
01h 37W	"	"	"	"	12-12	"	20/15		"
01h 40W	"		"	"	12-	"	30/	clouds again	"
	Dec D19	9mi	G6						

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Date Aug 22/23 Fri/Sat Observer G. R. Julian Day

Dome Temp. 39°
Focus 0
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39794	HD 116656	13h 19.9m	+55° 27'	G12	IIIaJ-E	9/.9	68°F	19:52	19:59	A	0°24W
39795	HD 117635	16 19.1	+32° 34'	"	IIaO-E	13/.5		20:08	20:33	B	0°30W
39796	HD 161321	17 39.7	+14° 27'	"	IIaO-E	13/.5		20:37	21:01	B	1°04W
39797	HD 167771	18 11.6	-18° 30'	"	"	"		21:07	21:52	C	0°52W
39794T	cal step wedge				IIIaJ-E			180 sec			1h08
39797T	cal step wedge				IIaO-E			90 sec			
39798	HD 170000	18h 21m 0s	+71° 17'	G-12	IIIaJ-E	9/.5		21:58	22:23	A	0°49W
39799	HD 170073	18h 22.5m	+58° 45'	G-12	IIIaJ-E	13/.5		22:27	23:06	B	0°38W
39800	HD 190918	20h 02m.2	+35° 39'	"	IIaO-E	13/.5		23:10	00:16	C	0°59W
39801	HD 212097	22h 16.7m	+27° 50'	"	IIIaJ-E	9/.5		00:22	01:07	A	00°34W
39802	"			G-16	IIIaJ-E	9/.5		01:19	02:12	C	0°39W
39803	HD 217675	23h 57.3m	+41° 47'	"	IIaO-E	"		02:15	02:38	A	0°19W
39804	"	"	"	G12	IIIaJ-E	9/.5		02:48	03:06	C	0°25W
39805	HD 212097	22h 16.7m	+27° 50'	"	"	9/.9		03:15	03:32	A	0°25W
39806	HD 04760	3h 51m.1	+37° 43'	"	"	9/.5		04:04	04:27	C	0°32W
39807	HD 24912	3h 58m.5	+35° 20'	"	"	"	40°	04:22	04:40	A	0°23W

Dome Temp. 70°F 72°?

Focus D

Dome Temp.

Transparency Conditions thin cloud → clear

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
04h 21W	+55° 08		2.27	A2 V	22 22-22	A 225 *	40/100	* at far right of box	fine guiding
01h 56W	+32° 30'	2"5"	6.18	A3 V	7-7-7	Sp Bri Blu	100/140		fine
01 04W	+14°32		6.07	Am	7-7-7	Sp Bri Blu	100/140		fine
01h 21W	-18° 20'		6.63	07 III	7-7-7	Sp Bri Blu	100/140	broken 2 pieces	fine
Dew Dip 7mi @		69°F						* at right of box	
01h 47W	+71° 24'		4.18	ApSi	22 22-22	Sp Bri-Blu	40/74		fine
02 28W	+58° 51		4.93	A1 V	22-22-22	" "	40/71		fine
01h 56W	+35° 40'		7.60	WN4.5 +09536	7-7-7	Sp Blu Blu	400/220		
00h 34W	-28-17		4.83	B8 V	22-22-22	Al Sol Std Sta	40/71	Sol'n by mistake	fine
01h 38W	+25° 17'		"	"	3-3-3	"	100/100	middle of Box	fine
01h 04W	+4° 15'		3.13	Blp	3-3-3	Sol Std	75/150		fine
01h 51W	"		"	"	22 22-22		100/100	weak arc	fine
03h 17W	+24° 17'		1.45	F0 V	22-22-22	Sol Std Sta	40/60		weak
02h 04E			2.71	A0 V	22-44	Sp Bri Blu	100/150	" "	weak
01 30E			4.04	B7	22-22-22	"	100/200	" "	fine

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II 2

Date Aug 22/23 1925 Observer Gn-R Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
3980771	cal. sky w/ sc	for pl. 72	3h 8m 2 - 03		IIaF E		5 mm				
3980772	cal. sky w/ sc	for plate	3h 8m 4 - 07		IIaJ E		180 mm				

Dome Temp.
Focus
Dome Temp.

Dome Temp. .....

Focus .....

Dome Temp. 50°F (3½

Transparency Conditions .....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
										middle of Box	

65

Date Sun Mon Aug 24-25 1975 Observer A.J. R Julian Day

Done Temp.
Focus
Done Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39105	HD 186547	19h 39.9	+13° 04	G-12	IIa O-E	13/.5	70°F	20 00	20:45	F	0°35'
39809	HD 190658	20h 00.9	+15° 13'	G-12	IIa O-E	13/.5		20:51	23.05	B	00°54'
39810	HD 186547	19h 39.9	+13° 04	G-12	IIa O-E	13/.5	70°	23:08	2340	C	0°34'
3781071	cal step wedge				IIa O-E	90 sec					

Dome Temp. 78°F 90%

Focus 0

Dome Temp. 76°F 98%

Transparency Conditions hazy

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01h02E	+13°23	2-3	6.1	B8II	7-7-7	Sp Bri - Md	400/161		thin
00h54W	+15°33'	3-4	6.34	M2III	7-7-7	" "	400/300	thin cloud	sl wk Spectra, thin
01h50W	+13°23'	2-3	6.1	B8I	7-7-7	" "	400/150		
								dome drippers wet	
								and heavy fog moving in	

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Date Mar Tues 25-26 1975 Observer Re -Ri Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
		1855	1855								
39811	+20°4139 AB	19 20.5	+20°52	G-40	IIa-O E	17/.5	76°F	22:17	22:35	A	
								00:25	00:44		
39812	+20°4139 AB	19 20.5	+20°52	G-40	IIa-O E	17/.5		00:45	01:15	B	
39813	HDE 227018	19°54.4	+34°55	G-40	IIa-O E	17/.5		01:20	02:27	A	
39813F1	cal step wedge				IIa-O E	9 sec		first half of cal			
39813F2	cal step wedge				IIa-O E	9 sec		second half of cal			
39814	+25°4059	20 12.1	+25°12	G-40	IIa-O E	17/.5		02:32	02:52	A	
39814F1	focus test						74°F			A	

Dome Temp.
Focus
Dome Temp.

Dome Temp. .....

Focus 6.437.5

Dome Temp. 78°F 97%

Transparency Conditions hazy, mist clouds at first

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	21°14'	4"	7.4	B	3-	Re-dust	800/	N^th component approx ±0.35 for clouds	
03h15W					3-3		800/60	restarted at 40.25	
03h47W	+21°14'		~7.4	B	333		800/60	South component first component never used put in with fluid flats out	
04h26W	+35°21'		9.4		3-33		800/60		
04h34W	+25°42'		6.7	B3	3-33		800/52	clouds / clear up	
					6-6			setting 37½	

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Date Tues/Wed Aug 26/27 **Observer** Re-Ri **Julian Day**

Dome Temp. 7
Focus 30
Dome Temp. 6

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39815	+20°4142	19h 20.5 (1855)	+20°52 (1855)	G-40	IIa0-E	17/.5	72°F	19:50	19:56	A	
39816	-02° 4601	18h 14.0	-02006	G-40	IIa0-E	17/.5		20:04	22:09	A	
39817	+22° 3687A	19h 18.6	+22° 30	G-40	IIa0-E	17/.5		22:13	23:42	A	
39818	+19° 4027	19h 21.2	+19°52	G-40	IIa0-E	17/.5		23:48	00:33	A	
3981871	cal step wedge for plates 39813 - 39819				IIa0-E	90sec					
3981872	cal step wedge for plates 39815 - 39819				IIa0-E	90 sec					
39819	+20° 4146A	19h 21.0 (1900)	+20°23 (1900)	G-40	IIa0-E			00:37	01:17	A	
39820	HD 196547	19h 39.9	+13°04	G-12	IIa0-E	13/.5		01:24	02:09	A	
39821	HD 190918	20h 02.2	+35°31	G-12	IIa0-E	13/.5		02:15	03:44	B	
3982171	cal step wedge for plates 39820 - 39822				IIa0-E	90sec					
39822	HD 23862	03h 43.3	+23°51	G-12	IIa0-E	9/.7		03:51	04:24	A	

Dome Temp. 74°F 75%

Focus 36

Dome Temp. 63°F 85%

Transparency Conditions good with the odd cirrus clouds
poor seeing

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01h29E	+21°10'	3	7.3	—	1-1-1	Redust	8m/60		
01h49W	-01°54'	4-5	10.9	A4	1-1-1		8m/60		
02h19W	+22°50'	4-5	10.2	Be?	1-1-1		8m/60		
03h08W	+20°14'	4-5	9.3	—	1-1-1		8m/60		
03:52W	+20°44	4-5	8.5	B9	1-1-1		8m/60		
04h27W	+13°23'	5-10	6.1	B8III	7-7-7	Sp Rich - Hd	4m/60		
05h44W	+35°50	5-10	7.60	WN4/5 09.5Ia	7-7-7	Fgi - T...	4m/210		fair
01h23E	+24°10'	8-10	5.1	B8p	7-7-7	Shell-Gl	2m/100		fair

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Date Wed Thurs Aug 27-28 **Observer** Ke-Tq **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900/1855	Declination 1900/1855	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39823	BD+15 3311	19 19.4	+15 16	G40	IIa-0-c	17/.5		20:01	20:33	A	00 47E
39829	"	"	"	"	"	"		20·36	21·13	A	00 07E
39825	BD+20 4146	19 21.0 1900	+20 23 1900	"	"	"		21·17	22·40	A	01 19W
39826	+17°3986	19 23.9	+17°57	"	"	"	66°F	22·46	00:49	A	03 35W
39826T	Col. disp. wedge		180sec		IIIa-J-e	for 39828					
39827	+23°3765	19 40.3	+23° 30	"	IIa-0-c	"		00:54	01:16	A	04 11W
39828	HD 233902	03 43.3 1900	+23 51 1900	G12	IIIa J-e	13/.5	65°F	01'55	04:08	A	0 11E
39829	BD 21°675 = α And.	23 57.3	+41 47	"	"	13/.3		04 14	04 30	B	02 14W

Dome Temp. 70°F 70%

Focus 35 ½

Dome Temp. 60°F 82%

Transparency Conditions Photometric till 23h

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00 47E	+15 37	2"	8.9	FO	1-1-1	Re dust	800/80		
00 07E	"	2"	"	"	1-1-1	"	800/87		
01 19 W	+20 44	1"-2"	7.6	—	1-1-1	"	800/60		
03 25 W	+18 19	3"	10.7	—	1-1-1	"	800/60	Cloud	
04 05 W	+23°55'	2"	9.2	—	1-1-1	"	800/60		
01:39E	+24 11	2"-8"	5.1	B8p	22/22/22	Shell-G1	200/600		
03:34 W		3	3.62		2-2-2	Shell	40/100		

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Date Sat-Sun Aug 30-31 **Observer** Ro-Jo **Julian Day**

Plate No.	Object	R.A. ~~1900~~ 1975	Declination ~~1900~~ 1975	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39830	Nova Cyg	21 10.9	+47 58	G12	IIIa-J-e	9/.9	69°F	20:04	20:37	A	02 15 E
39830T	Cal step	wedge	180sec		IIIa-J-e	for	39830				
39831	Nova Cyg	21 10.9	+47 58	G16	IIa-F-e	9/.9		20:45	21:04	B	01 46 E
39831T	Cal step	wedge	5 min		IIa-F-e	for	39831				
39832	Nova Cyg	21 10.9	+47 58	G12	IIIa-J-e	11		21:10	21:53	A	01 00 E
39832	"	"	"	"	"	"		21:56	23:04	C	00 03 W
39832T	Cal step	wedge	180sec		"	for	39832	33, 36, 37, 39, 41, 44			
39834	Nova Cyg	21 10.9	+47 58	G16	IIa-F-e	13/.9		23:15	23:54	B	00 57 W
39834T	Cal step	wedge	5 min		IIa-F-e	for	39834	35, 38, 40, 43,			
39835	α Cyg	20 40.6	+45 11	G16	"	13/.9		23:58	00:12	A	01 49 W
39836	"	"	"	G12	IIIa-J-e	13/.9	62°F	00:17	00:25	C	02 W
39837	Nova	21 10.9	+47 58	"	"	"		00:28	00:54	A	02 01 W
39838	"	"	"	G16	IIa-F-e	"		01:00	01:10	C	02 16 W
39839	Nova Cyg	"	"	G12	IIIa-J-e	"		01:15	01:56	A	01 52 W
39840	"	"	"	G16	IIa-F-e	"		02:02	02:19	B	03 02 W
39841	"	"	"	G12	IIIa-J-e	"		02:26	02:51	B	03 57 W

Dome Temp.
Focus
Dome Temp.

Dome Temp. 68°F 11-97 Transparency Conditions Bad

Focus M-R

Dome Temp.

Reading Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	A	0217E	+48°08	2-5'	~2	≈G	22-22-25	Nova	40/160	Cloud from SE	
			Dew 7 min @ 68° D-19								
1:04	B	01h49mE	"	2"3"	2	≈G	3-3-3		40/100	" "	
			Dew 5 min @ 68° D-19								
2:13		0100 E		2"-4"	~2	G	22-24-22		40/300	Broken 2pc. cond	
2:14	C	0007W	48 06	2-3"	~2	≈G	22-22-22		40/300	clear - SI Fog in ? haze	
39,41,44			Dew 7½ min @ 67°F D-19							Broken 1pc cond (1½" 10x)	
2:54	E	0057W		3-4	~2	≈G	No filter 3-3-3		40/100	* Aft air right of Box	
				Dew 5½ min @ 67° D-19						*	
3:12	F	0148W			1.3	A2p	3-3-3	SCI	40/200	*	
3:25	C	0201W			1.3	"	22-22-22	"	40/100		
3:40	F	0201W		"	1.5		22-22-22	Nova	40/300		
4:10		0216W					No filter 2-2"		40/100	* Dome off	
4:26		0302W		2-3		N	23-22-22		40/300	1" Dome off	
4:49	B	0325W		2"			3-3-3		40/110	*	
2:57	B	0357W			1.5		22-22-22		40/300		

65 1/2 #2

Date ..... **Observer** ..... **Julian Day** .....

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900 ~~75~~	Declination 1900 ~~1975~~	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39842	Nova Cyg	21 10.9	+47 58	G12	IIa-O-e	13'.9		02 53	03:58		04 14 W
39843	"	"	"	G16	IIo-Fe	"		03:06	03:25	B	04 32 W
39843T	Cal step wedge		90 sec		IIa-O-e	for 39842					10m
39844	Nova Cyg.	21 10.9	+47 58	G12	IIIaJe	13'.9		03 33	04:33	C	1 18 W
	~~HD 217675~~	~~23 00.8~~	~~+42 11~~	G12	"	9'.9				A	

Dome Temp. .....

Focus .....

Dome Temp. 162° H=9470

Transparency Conditions .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
04 04 W		2"	1.5	GK	7-14 no -1 -on	1 avg	40/40	*	
04 32 W		4"			3-3-3	"	40/100	*	
Dev	5½ m @ 67°	D-19						*	
05 10 W	+48 08	2"-4"			22-2222	1 avg	40/200		
			3.62	B5			40/		

Date Tues/Wed Sept 2-3, 75 **Observer** Epi-Tu **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39845	Nova Cyg	21h 10.9m	48° 02'	G12	IIIaJ-c	13/.5	65°F	19:35	20:38	A	
39846T	Cal wedge	wedge	for 39845,50,52-55	"		180sec		Dw 7 min			
39846	1909 18	20h 02.m2	35° 31'	G12	IIIaJ-c	18/.5		20:45	21:40	B	
39847T	Cal Strip	Wedge	for 39846, 39847	"		90sec		Dw 9 min	66°F		
39847	Nova Cyg	21h 10.9m	48° 02'	"	"	13/.5		21:46	22:04	C	
39848	Nova Cyg	"	"	G16	IIIaF-c	9/.9		22:12	23:19	B	
39848T	Cal Strip	wedge	39848		"	5 min		23:24	23:29		
39849	Nova Cyg	21h 10.9m	48° 02'	G12	IIIaJ-c	13/.5	39°F	23:26	00:03	C	
39850		"	"	G12	IIIaJ-c	13/.5		00:05	01:18	B	
39851	Nova Cyg	"	"	G16	IIIaF-c	13/.5		01:26	01:46	C	
39852		"	"	G12	IIIaJ-c	"	55°F	01:54	03:03	B	
39853	"	"	"	"	"	"		03:05	04:12	C	
39854	HD 217782	22h 58.0m	+42° 13'	"	"	13/.5		04:17	04:25	A	
39855	HD 217675	22h 57.1m	41° 27'	"	"	9/.5		04:28	04:54	B	

Dome Temp. 62°F H=E7½

Focus 11-R => 30-R

Dome Temp. 52° H=95½

Transparency Conditions Good Partly

E 8

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		02 02E	+9° 05	2-3	4.5		22-22-22	Nova	40/150	** At Cor right of Exp *	
		D19									
		00 04W	+35° 45	2-3	6.83	4119.5 +39.5	7-6-6	Fgn Trans	40/220		
		D19									
	C	00 38E	+9° 05	2-5			7-6-7 no filter	NOVA	40/12		
		00 37 W	"	"			3-3-3	"	40/100	*) } in middle of Exp *)	
		Dus 5 mm	65°F D19								
		01 21W	+9° 05				7-6-6	NOVA	40/80		
	B	02 36 W	+8° 05	2-3			22-22-22 no filter	"	40/175	**	
16	C	03 04 W	"	2-4			3-3-3	"	40/60	*	
	B	04 21 W	"	"			22-22-22	"	40/170	** Focus 30-R	
12	C	05 31 W	"	3-5			22-22-22	"	40/145	** TV guide rem) Exp 5 mm D19	
45	A	03 56 W	+9° 42	"	5	AZ	2-	"	40/15	** Seems to) wrong star	
54	B	04 W	+9° 16	"	3.62	BCp	22-22-22	Shell *	40/70	** right star	

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Date Wed/Thurs 2/4 Sept 1973 Observer B'n-Tn Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39855	Near Cygnus [illegible]	21h 10.9 [illegible]	[illegible]	[illegible]	[illegible]	13/.5	[illegible]	19:39	21:40	A	[illegible]
39856 T	Cal strip edge	180sec			"						
39857	Near Cygnus edge	21 10 9.75	+47 52	G/6	Ea. 1-C	13/.9		21:45	22:31	B	[illegible]
39857 T	Cal strip edge	5 min			"						
39858	Near Cygnus [illegible]	21 10 9.75	+49 56	G/6	IIa-FC	13/.9	61°F	22:32	23:19	A	[illegible]

Dome Temp. 57° H=80%

Focus 201R

Dome Temp. .....

Transparency Conditions Good - Some Cirrus

* Tc (end of Ev

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
10	A	00 58E	+18 06	1.3"	V= 5.1	Nov	24-[illegible]	Nov	90/300	*	sc wk
										*	
2131	A	00 07E		1"	V= 5.1	Nov	24-1-9	Nov	90/150	Pl ⊥ ⊥ !	
119	A	00 45 W		1.5"		Nov	24-1	Nov	90/150	[illegible]	
										(labelled as 35857)	

71 II 1

Date 4/5 Sept. 1971 Tonight **Observer** Bl.-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39859	Nova Cyg. 1971	21h 10m.9 (1950)	+47° 58'	G-12	IIIa-J E	20/1.5		19:31.0	22:52	A	
39859T	Cal step	wedge	180 sec	for	39859						
39860	Nova Cyg. 1971	21 10.9 (1950)	+47 58	G16	IIa-F	20/1.9	63°F	23:27	00:27	B	
39861	HD 21.697	22h 16m.7	+47° 50'	G-12	IIa-F E	19/1.7		00:32	01:08	C	
39862	Nova Cyg.	21 10.9	+47 58	G-12	IIa-O E	13/1.7		01:17	02:33	A	
39862T	Cal step	wedge	5 sec		IIa-F E	for	39860	61, 70			
39862 72	Cal step	wedge	9 sec		IIa-F E	for 39862		69, 71, 72			
39863	HD 26961	04h 10m.7	+50° 03'	G12	IIa-O E	13/1.5		02:37	02:42	B	
39864	HD 12929	02 01.5	+22 59	G-12	IIa-O E	9/5		02:47	03:05	C	
39865	HD 12929	02 01.5	+22 59	"	"	13/1.5		03:14	03:16	B	
39866	HD 26961	04 10.7	+50 03	"	"	13/1.9		03:20	03:28	C	
39867	"	"	"	"	"	"		03:29	03:36	B	
39868	HD 26961	04 10.7	+50 03	G-12	IIa-O E	13/1.9		03:38	03:47	A	
39869	"	"	"	"	"	"		03:48	03:56	B	
39870	"	"	"	G16	IIa-F E	13/1.5		04:02	04:35	A	
39871	"	"	"	G-12	IIIa-J E	13/1.9		04:41	04:49	B	

Dome Temp. 66° F H: 73%

Focus 20-R

Dome Temp. 58° H: 97% wet

Transparency Conditions Fair - Poor - Bad

* To far right of Box

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		00 19W	+46° 06'	2	54	N	30-30-30	Nova	80/400	++ } To far left of Box ++ }	Fair
		01 50W		2	54	N	not filter 4-4-4	Nova	20/300	* Forgot to uncap grating	Fair
		01 25W	+42 47	2½"	40	B7V	No filter 4-4-4	Nigel Std	60/240	* Long exposure	Fair
2.33	A	04 00W	+42 07	1	54	N	silver 7-7-7	Nova	80/140		Fair
										* To far left of Box	
	K	02 57E		2-3	40	Neg	7-7-7	Sky Pol	80/240		Fair
2.05	C	02 05E	+42 04		51	DX	7-7-7	Shell-G1	80/40		Fair
	B	00 12E			315	K2III	11-11	Std Vel	80/50		Fair
3.24	C	02 11E			457	A2V	7-7-7	Sky-Kitt	80/50		Fair - guiding
2.00	B	02 02E	+50° 13'		"	"	7-7-7	"	80/50		Fair
1.42	A	01 51E			"	"	11-11	"	80/50		Fair
	B	01 42E	+50 16		"	"	11-11	"	60/50		Fair
2.35	A	01 05E			"	"	no filter 4-4-4	"	80/200	*	Fair
2.11	B	00 51E		2"			7-7-7	"	80/50	Fair (Poor - Bad)	Fair - guiding

23 #2

Date..... Observer..... Julian Day.....

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39672	HD 36951	05 18 7	+50 02	612	[illegible]	13.9		04:50	04:57	E	[illegible]
39673F	Focus					13	57°F			E	

Dome Temp. .....

Focus .....

Dome Temp. 58°F P = 72

Transparency Conditions .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
10 45 E		2	7	A2	H-K		21/5		fair cirrus

70 Visitors - 1 6"

Date 6/7 Sept 75 Sat-Sun **Observer** CME - TH **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39873	189687	19 56.2	36 46	612	IIa-O2	13/1.5	59°F	21:10	21:22	A	00 08W
39874	212076	22 16.5	11 42	"	"	"		21:28	21:41	C	01 55E
39874T	Cal stg wedge		96sec		"						
39875	Nova Cyg 75	21 10.9 75	+47 58	G12	"	20/1.5		21 51	22:45	A	1618 W
39876	189687	19 56.2	36 46	"	"	13/1.5		22:52	23:06	B	01 52 W
39877	212076	22 16.5	+11 42	"	"	"		23:10	23:21	C	0015 E
39878	Nova Cyg '75'	21 10.9 75	+47 58 75	"	"	20/1.5		23:27	00:32	A	01 57 W
39879	189687	19 56.2	36 46	"	"	13/1.5		00:27	00:37	B	03 22 W
39880	16562	2 34.4	-00 06	"	"	13/1.5		00:46	00:53	C	0244 E
39881	"	"	"	"	"	"		00:54	01:01	A	0253 E
39882	212076	22 16.5	11 42	"	"	"		01:9.5	01:19	B	0145 W
39883	HD189687	19 56.2	+36 46	"	"	"		01:22.5	01:32	C	04 19 W
39884	Nova Cyg '75'	21 10.9 75	47 58 75	"	"	20/1.5		01:36	02:37	A	04 11 W
39885	189687	19 56.2	36 46	"	"	13/1.5		02:40	02:58	B	05 44 W
39885T	Cal stg wedge for	39875,78,84			"	90sec					
39886	HD212076	22 16.5	+11 42	G12	"	13/1.5	55°F	03:02	03:14	C	03 39 W

Dome Temp.
Focus
Dome Temp.

Dome Temp. 60°F H=93%
Focus 20-R
Dome Temp. 55 H=98% (34°86F Focus 55°F)

Transparency Conditions Good

! Note use July 75 new emulsion III-J.
* At Fe right of Fox

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	B	00.08W	37 05	2-4	5.17	B3Ve	7-7-7	β Cephei	200/60		Thin
	C	01 55E	+12 10	"	5.04	B2Ve	7-7-7	"	200/60		"
	A	20 18 W		2-4		N	5-5-5	Nova	200/250	*	"
	B	01 52 W	+37 05	"	5.17	B3Ve	7-7-7	β Cephei	200/70	(cont. cow up)	"
	C	00 15 E		2-3	5.04	B2Ve	7-7-7	"	200/65		"
	A	01 57 W	+48 08	2"-5"	5.9	N	5-5-5	Nova	200/250	*	"
	B	03 22 W	37 05		5.17	B3Ve	7-7-7	β Cephei	200/60		"
	C	02 45 E	00 17		4.07	B2IV	7-7-7	β Cephei	200/60		"
	A	02 53 E	"	2-3	"	n	7-7-7	"	200/60	broken 1pc seeing	"
	B	01 45 W	12 10		5.04	B2Ve	7-7-7	"	200/60		"
	C	04 18 W	37 05		5.17	B3Ve	7-7-7	"	200/60		"
	A	04 11 W	48 08		5.9	N	5-5-5	Nova	200/250	*	"
	B	05 44 W	37 05		5.17	B3Ve	7-7-7	β Cephei	200/70		"
										* Jugged	
	C	03 39 W	+12 13	2-4"	5.04	B2Ve	7-7-	β Cephei	200/66		(Scanty cows)

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Date [illegible] **Observer** [illegible] **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
39887	HD 109345	[illegible]	[illegible]	[illegible]	IIa-O	12/.5	[illegible]	21:29	22:05	B
39887 T	Cal step	wedge	[illegible]		"					

Dome Temp.

Focus

Dome Temp.

Hour Angle End
1 [illegible]

Dome Temp. 59F H. 79?

Focus 20-R

Dome Temp. .....

Transparency Conditions Intermittent Clouds - Windy 4 to 5

Ed

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1 40W	[illegible]		[illegible]	B[illegible], 7	[illegible] Soll		45/55	some cloud - Push Pkg weak	
approx	Dew 14 min @ 68°F D19							Pushing	
								Rain tog	

Recording Time E.S.T | P.H.

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Date 9/10 Sept 35 **Observer** Rut-Tu **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39888	HD 186547	19 39.9	+13 04	G12	Do-0-e	131.5	56°F	19:22	20:11	A	01:35 E
39889	Nova Cygni 35	21 10.9	+41 51	"	"	211,5	55°F	20:19	22:00	B	00:16 E
39891T	Cal edge	edge	edge		IIa-0-e			Dev 9 min @ 68° F		DIR	
39890	Nova Cygni 35	21 10.0	+41 56	G16	IIa-Fe	20/5	52°F	22:10	01:57	C	04:47 W
39890T	Cal edge	edge	edge		"	Cor " 20/30		Dev 5 min @ 68° F		DIR	
39891	AD 1388	00 41.1	+30 25	G12	Do-0-e	13/13	51°F	01:18	02:51	A	01:03 W
39892	HD 12027	01 53.0	+21 54	"	"	"		03:09	05:00	C	02:50 W

Dome Temp.
Focus
Dome Temp.

Dome Temp. 57° 4:22

Focus 40-R

Dome Temp. 44°F H=90% Cold

Transparency Conditions Excellent - Good

Fine Aurora by 22h

Saw 2 Red Fireballs - (meteors with tails)

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00 37 E	+13 23'	3-5"	6.1	B8 IV	7-7-7	Sp [illegible]	200/80	dark streaks across plate ?"	fair
00 15 E	+48 06	3-4"	6.5	N	5-5-5	Nova	200/250	" " " "	strong
01 43 W		2-3	7.5	N	4-4-4	Nova	200/510 *	* right hand side	strong
									fair
01 03 W	+30 54		8.80	K3 III	7-7-7	S S V-46	800/230		weak
02 00 W	+29 22	2"	8.96	K2 III	5-7-7	"	800/210		weak

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Wed - Thurs

Date Sept 10/11 1973 **Observer** Hd - Bul / He - But **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39893	HD 186547	19 39.9	+13 04	G12	IIa-Oe	13/1.5	56F	21.31	21 [illegible]	N	
39894	Vega Cygni	21 10.9	44 58	"	"	20/1.5		22 32	[illegible]	B	
39894T	Cal Step	Wedge	[illegible]		[illegible]		Dew 9 mi 68°F Dia				
39895	HD 16582	2 34.4	-00 06	G12	IIa-Oe	13/1.5		0046.5	00 59	C	
39896	"	"	"	"	"	"	56°	0103	0131	A	

Dome Temp. 50°F H = 117

Focus 35 R

Dome Temp. 60°F H = 100

Transparency Conditions Good – Fair

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 31W	+13 23	2"	6.1	B8 IV	7-7-7	Hd 513	200/50		Fair
02 20W	+48 07		6.1?	N	7-3-5	Nova	20=/250		Fair
02 18E			4.07	B2 V	7-7-7	R Cephei	200/60		Fair
02 16E	+00 18		"	"	7-7-7	"	20=/60	Sky: done dripping wet.	Fair

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Date Sept 12/13 Fri/Sat 75 Observer Lane - Post Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39897	HD 218634	23 04.5	8 08	12	IIa-E	1.5	56°F	00:12	02 30	A	
39897 T	Cal Step Wedge		90 sec		IIa-E						
39898	HD 16582	2 34.4	-00 06	G 12	IIa-O2	1.5		02:35	02:43	B	
39899	"	"	"	"	"	"		02:45	02:54	C	
39900	"	"	"	"	"	"		02:55	03:05	A	
39901	"	"	"	"	"	"		03:06	03:15	B	
39902	"	"	"	"	"	"		03:18	03:27	C	
39903	"	"	"	"	"	"		03:30	03:38	A	
39904	"	"	"	"	"	"		03:44	03:51	B	
39905	"	"	"	"	"	"		03:55	04:07	C	
39906	"	"	"	"	"	"		04:09	04:20	A	
39907	HD 16582	2 34.4	-00 06	G12	IIa-O2	1.5		04 29	04:36	B	
39908	"	"	"	"	"	"	47°F	04 41	04 48	C	
39908 T	Cal Step Wedge		90 sec		IIa-E						

Dome Temp.
Focus
Dome Temp.

Dome Temp. 50° 90°

Focus 40 R

Dome Temp. 48° 74°

Transparency Conditions Good thin cloud

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	A	02 31W	+08° 40'	6"-8"	6.6	m2III	7-7-7	Wat. Prog	200/165		Fair
		Dew 9pm DP									
	C	00 41E	00 22	6"	407	B2V	7-7-7	Capella	200/60		
	D	00 36E	"		"	"	7-7-7	"	200/60		
	A	00 25E	"		"	"	7-7-7	"	200/60		
	B	00 14E	"		"	"	7-7-7	"	200/60		
	C	00 02E	"	6'	"	"	7-7-7	"	200/60		
	A	00 08W	"		"	"	7-7-7	"	200/60		
	B	00 21W	"		"	"	7-7-7	"	200/60		
	C	00 36W	"		"	"	7-7-7	"	200/60		
	A	00 51W	"		"	"	7-7-7		200/60		
	B	01 07W	00° 22'		"	B2V	7-7-7	Capella	200/60	1° haze at all end	
	C	01 21W	"		"	"	7-7-7	"	200/60		

05

Date Sept 13/14 Sat/Sun 75 Observer KK - But Julian Day

Done Temp.
Focus 55
Done Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39909	HL 187013	19 45.4	+33 40	G12	IIaoe	9/.5	46°F	21:50	23:02	A	
39910	HD 196524	20 12.1	+14 15	G 12	"	9/.9		23:09	00 31	B	
39911	HD 217675	22 57.3	+11 48	"	"	9/.9		00:41	00 49	C	
39912	HD [illegible]	[illegible]	[illegible] 26	"	"	9/.5		01:00	02 08	A	
39912 T	[illegible] Shoe Wedge		90 [illegible]		II [illegible]						
39913	HD 1326	00 12.7	+43 50	"	"	18/.3	44°F	02:54	05 09	B	

Dome Temp. 46° H=86

Focus 55 R

Dome Temp. 44° H=91

Transparency Conditions Good - scattered clouds

85

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02 30W	+33 47	2-3"	5.4	F5	8-8-8	Atm-Spec	200/155	17 Cygni A clouds	fair-good, some cirrus
03 07W	+34 40		5.78	F5 V	8-8-8		100/150	clouds	
00 59W	+42 18	2-3"	3.6	B6p	8-8-8	Shell-Cls	100/102		
00 49W	+54 53	2-3"	5.34	F5p	8-8-7	Atm Sp	200/205	(broken w holes) clouds	Fair
	Dec 9mm	Dia	eGd-F						
01 05W	+44 00	2"	9.6		7-7-7		800/700	+43°44 = Grmb 34 A thinned	Weak

87 * New Bur Evac. 6h

Page (1)

Date Sept 14/15 Sun/mon Observer Fg-But/Cue-But Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
39914	HD 190918	20h 2m.2	+35° 31m	G12	IIaO-c	13/1.5	53°	19.37	20:16	A
39915	BD+35° 3956	"	"	"	"	18/1.3		20:24	22 25	B
39915T	Cal Step Wedge		90 sec		II a-O-e					
39916	NOVA CYG	21 10:7 1975	+71°58	G12	"	20/1.5		22:36	00:09	C
39917	HD 16582	2 34.4	-00 06	"	"	13/1.5		00 17	00:26	A
39918	"	"	"	"	"	"		00 29	00:35	B
39919	"	"	"	"	"	"		00 37	00:42	C
39920	"	"	"	"	"	"		00:48	00:55	A
39921	"	"	"	"	"	"		01:06	01 10	B
39922	"	"	"	"	"	"		01:12	01 20	C
39923 *	"	"	"	"	"	"		01:24	01 32	A
39923T	Cal Step Wedge		90 Sec		II a-o-e					
39924	HD 16582	2 34.4	-0006	G12	IIaoc	13/1.5		01 36	01 44	B
39925	"	"	"	"	"	"		01 46	01 54	C
39926	"	"	"	"	"	"		02 02	02 08	A
39927	"	"	"	"	"	"		02 17	02 22	B

Dome Temp.
Focus
Dome Temp.

Hour Angle End

Dome Temp. 55°F H=70%

Focus 40 R

Dome Temp. 50°F H= 88%

Transparency Conditions Sl Haze thin cloud

85

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0.16	M	00 33E	+35 51	1-2	6.83	W4.5 F09	7-7-7	Fgn Thurs	800/457	in Box #3	fair
0125	B	01 35W	+35 50	1-2	8.85	B0.5V	7-3-3	11	800/200	broken - 2 pieces	fair
			Dew 9m	Dia @ 65°F							
0201	C	02 14W	+48 08	1	7.2	N	5-5-5	NOVA	200/250		strong
0215	A	02 38E	+00 22	2	4.07	B2IV	7-7-7	β Cephei	200/60		fair
0217	B	02 47E	11		11	11	7-7-7	11	200/60		fair
0211	C	02 39E	11		11	11	7-7-7	11	200/60		fair
0210	A	02 26E	11		11	11	7-7-7	11	200/66		fair
0208	B	02 11E	11		11	11	7-7-7	11	200/60		fair
0206	C	02 02E	11		11	11	7-7-7	11	200/60		fair
0204	A	01 49	11		11	11	7-7-7	11	200/60		V fair
			Dew 9m	Dia @ 69°F							
0158	B	01 37	+00 22		11	11	7-7-7	11	200/60		fair
0156	C	01 27	11		11	11	7-7-7	11	200/60		fair
0153	A	01 13	11		11	11	7-14	11	200/64		fair
0152	B	00 59	11	1	11	11	7-7-7	11	200/61		fair

Date Sept 14/15 Observer Lee-But Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39928	HD 16582	2 34.4	-00 06	G 12	IIa-0	13/.5		02 30	02 36	O	
39929	"	"	"	"	"	"		02 45	02 50	A	
39930	"	"	"	"	"	"		03 00	0304	B	
39931	"	"	"	"	"	"		03 13	03 17	C	
39932	"	"	"	"	"	"		03 24	03 27	A	
39933	"	"	"	"	"	"		03 36	03 40	B	
39932T	Col Strip	Wedge	90 sec		IIa-0						
39934	HD 16582	2 34.4	-00 06	G 12	"	13/.5		03 49	03 56	C	
39935	"	"	"	"	"	"		04:04	04 10	A	
39936	"	"	"	"	"	"		04:15	04 20	B	
39937	"	"	"	"	"	"		04:29	04 33	C	
39938	"	"	"	"	"	"		04:40	04 45	A	
39939	HD 16582	2 34.4	-00 06	G 12	IIa 0.2	13/.5	50°	04:54	05 00	B	

Dome Temp. 5
Focus
Dome Temp. 4

Dome Temp. 50°F H 71%

Focus .....

Dome Temp. 49°F H 92%

Transparency Conditions Good

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00 45 E	+00 22	1"	4.07	B2	7-7-7	2 Cephei	200/60		
00 31 E	"		"	"	7-7-7	"	200/60		
00 17 E	"		"	"	7-7-7	"	200/60		
00 01 E	"		"	"	7-7-7	"	200/60	↑ in Box #3	
00 06 W	"	1"	"	"	7-7-7	"	200/61		
00 19 W	"		"	"	7-7-7	"	200/60	in Box #1 (broken) ↓	
	Dew 9mi	Dew	@ 65°						
00 34 W	+00 22		"	"	7-7-7	"	200/60	thin cloud	
00 42 W	"		"	"	7-7-7	"	200/60		
00 59 W	"			"	7-7-7		200/60		
01 12 W	"				7-7-7		200/60		
01 24 W	"			"	7-7-7		200/60		
01 49 W	+00 22		4.07	B2	7-7-7	2 Cephei	200/60		

a1

Date Sept 17/18 Wed-Thurs Observer KK-TG Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39940	HD187013	19 42.6	+33 30	G43	Ia-O-e	131.9	62°F	19:30	20:09	A	00m45
39940T	Col step wedge		90sec		"						

Dome Temp. 6
Focus 20-
Dome Temp.

Dome Temp. 65°F H= 85% Transparency Conditions Hazy - cloudy

Focus 20-R - Tension nut was not tense"

Dome Temp.

Reading Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0:09	A	00 09 E	+33 45	2-3	3.0	F5	3-3-3	As sp-kk	209/37	Clouds Fog	

93

Date Sept 21-22, 1975 Sun-Mon Observer Fgi-Tn / Lne-T Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39941	HD 190918	20^h 2.2	+35°31′	G12	IIaO-e	18/1.5	59°F	22:45	23:56	A	03 35W
39941 T	Cal step	wedge	90sec		"						
39942	Nova Cyg 75	21 10.9 75	+47 58	G12	"	18/1.5		00:02	03:03	B	05 35W

Dome Temp. 5
Focus 20-
Dome Temp.

Dome Temp. 58°F H=96%

Focus 20-R

Dome Temp. .....

Transparency Conditions Clear by 22:15

Ending Time E.S.T	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1:56	A	03 35W	+35 51	3-4	6.83	W4.5 +09	7-7-5	Fiji Thesis	400/220		
2:03	B	05 36W	+48 10	2-3"	27	N	5-6-6	Nova	400/315	Looking more blue) cloud	
										Too wet. Stop exp's	

95

Date SEPT. 24/25 Wed-Thur 75 **Observer** Tnr – But **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
39943	HD 185859	19 36.1	+20 15	G43	IIa-O-e	15/.35	56°F	19:15	19:37	A
39944	HD 186980	19 42.4	+31 52	"	"	"		19:42	20:37	B
39944T	Cal Step Wedge		90 sec		IIa-O-e					
39945	HD 190066	19 59.1	+21 52	G43	"	15/.35		20:43	21:02	C
39946	HD 191877	20 07.0	+21 35	"		"		21:06	21:17	A
39947	HD 186746	19 41.2	+23 41	"	"	"		21:23	21:58	B
39948	Nova Cyg. 1975	21 10.9 (1975)	+47 58 (1975)	G12		20/.5	52°F	22:15	00:01	C
39948T	Cal Step Wedge		90 sec		IIa-O-e					

Dome Temp. 5
Focus
Dome Temp. 5

Hour Angle End

Dome Temp. 54°F H=75%

Focus 42 R

Dome Temp. 50°F H=77%

Transparency Conditions Thin cirrus

96

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00 07E	+20 33	2-3	6.9	B0.5Ia	2-2-2	Tnr-Vul08	800/120	½" broken off end	
00 47W	+32 10	3-4	7.4	F1.5III	2-2-2	"	800/120		
Dew 9min @69°F D19									
00 57W	+22° 13'		6.7	B1Iab	2-2-2	"	800/121		
01 03W	+21° 57'		6.2	B1Ib	2-2-2	"	800/120		
02 09W	+24 00	3-4	8.0	B8Ia	2-2-1	"	800/120		
02 44W	+48 08		~7	Nova	5-5-5	Nova	400/215*	Cloud *push (on right hand side)	
Dew 7min	@69°F	DA							

97 Visitors till 21:45
2 groups

Date Sept 27/28 Sun 75 **Observer** KK But **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39949	HD186858	19 41.8	+33 22	G43	IIa-a F-2	13/.3	55°F	22:05	23:05	A	
39949T	Cal Step Wedge		5 min		IIa-a F-2						
39950	HD 1326	0 12.3	+33 24	G43	IIa-a O-2	"	52°F	23:15	05:1	B	
39950T	Cal Step Wedge		90 sec		IIa-a O-2						

Dome Temp. 57
Focus 35
Dome Temp. 54

Dome Temp. 55° H- 94%

Transparency Conditions V. Good - cle

Focus 35 - R

Dome Temp. 54°F H= 85%

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
03 27 W	+32° 41'	2"-1"	8.7	dK5	5-5-5	Acm-Sp	4000 / 66	w/ Wratten 8 before slit E=570	St side
Dev Sept 27.									
05 05 W	+43° 58'	2.2"	9.6	M1 V	3-3-3		800 / 203	* cloud then clear Sun 24	
Dev 9 min @ 68°F D19								*	
								* left hand side of Sun 2	

aq
#1.

Date Sept 28/29 Sun Mon 75 **Observer** Eg. But/Lu - But **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39951	HD 190916	20° 02.2	+35° 31'	G12	IIaOe	13/.5	60°F	17:57	18:36	A	
39952	"	"	"	G16	IIaF-2	"		19:50	20:52	B	00 SW
39952T	Cal Step Wedge		5 min		IIaF-2						
39953T	Cal Step Wedge		90 sec		IIaOe		For	51-64			
39953	NOVA CYGNI	21h 10.9	+47° 58	G16	II-a-F-2	20/.5		20:58	23 13	C	
39954	"	"	"	G12	II-a-O	"		23:23	00 44	C	
39954T	Cal Step	Wedge	90 sec	"	IIa-						
39955	HD 22951	03 36.0	33 39	"	IIaO-2	13/.5		01:10	01:15	A	
39956	24760	03 51.1	39 43	"	"	"		01:23	01:25	B	
39957	27192	04 12.6	50 41	"	"	"		01:46	01:52	A	
39958	26912	04 10	08 39	"	"	"		02:03	02:07	B	
39959	HD 22951	03 36.0	33 39	"	"	"		02:15	02:19	C	
39960	24760	03 51 1	3943	"	"	"		02:25	02:28	A	
39961	27192	04 12.6	50 41	"	"	"		02:35	02:41	B	
39962	26912	04 10.1	08 39	"	"	"		02:49	02:52	B	
39963	HD 22957	03 36.0	33 39	"	"	"		03:03	03:17	C	

Dome Temp.
Focus
Dome Temp.

Dome Temp. 65°F H=61%

Transparency Conditions Excellent

Focus 35.8

Dome Temp. .....

100

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		00 27E	+35° 50'	< 1"	6.83	WN 4.5 +09	7-7-7	[illegible]	400/220		
		00 58W	"	"	"	"	3-5-4	"	400/400	* right hand side of Box #2	
		Dew 5 min @ 68°F		DIS							
		Dew 9 min @ 68°F		DIS							
		02 13W	+48° 08'		~7	NOVA	4-4-4	NOVA	80/150		
		03 45W	"		"	"	7-3-3	"	200/120	Push : Dec same as 39948 (on r.h.s. of Box # 6)	
		Dew [illegible] @ 68°F		DIS							
		02 13E	+33° 58	1-2	4.96	B0.5V	7-7-7	β Cephei	200/60		
		07 19E	+40° 02		2.88	B0.5V	7-7-7	"	200/74	39951 SET 55 ⋮ 64 middle of Box # 2	
		07 16E	+50° 56		5.50	B2N	7-7-7	"	200/60		
		01 54E	+08° 56	1-2	4.28	B3V	7-7-7	"	200/60		
		01 09E	33° 58		4.96	B0.5V	7-7-7	"	200/60		
		01 16E	40° 02		2.88	B0.5V	7-7-	"	200/60		
		01 25E	50° 56		5.50	B2N	7-7-7	"	200/60		
		01 10E	08° 56		4.28	B3V	7-7-7	"	200/60		
		06 16E	33° 58		4.96	B0.5V	7-7-7	"	200/60		

101

#2

Date Sept 28/29 Sun-Mon 75 Observer Lee - Burt Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39964	HD 24760	03 51.1	39 43	612	IIa-0	13/5		03:17	03:20	A	0074E
39965	27192	04 12.6	50 41	"	"	"		03:44	03:49	C	0075E
39966	26912	04 10.1	08 39	"	"	"		03:28	03:31	B	0076E
39966T	Cal Step Wedge		90 sec		Base		for	65-74			
39967	HD 22951	03 36.0	33 39	612	IIa-0	13/1.5		03:55	04 00	B	0077W
39968	24760	03 51.1	39 43	"	"	"		04:04	04:07	C	0073W
39969	27192	04 12.6	50 41	"	"	"		04:13	04:20	A	0074W
39970	26912	04 10.1	08 39	"	"	"		04:26	04:29	B	0075W
39971	HD 22951	03 36.0	33 39	"	"	"		04:34	04:39	C	0076W
39972	24760	03 51.1	39 43	"	"	"		04:45	04:47	A	0077W
39973	27192	04 12.6	+50° 41			"		04:52	04:58	B	0078W
39974	HD 26912	04 10.1	08 39	"	"	"	57°F	05:04	05:09	C	0079W
redo											

Dome Temp. 60° H=80%

Focus .....

Dome Temp. .....

Transparency Conditions .....

Ending Time E.S.T	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
3:10	-	0024E	40°02		2.88	Bo.5V	7-7-7	βCephei	200/60		
3:49	C	0017E	50°56		5.50	B2IV	7-7-7	"	200/60	3+4 63 7 1 74 } l.h.s of Box #6	
3:31	B	0031E	08°56		4.28	B3V	7-7-7	"	200/61		
		Dawn	9min @ 68°F		D19						
	B	0031W	33°58	2"	4.96	Bo.5V	7-7-7	"	200/61		
4:07	C	0023W	40°02		2.88	Bo.5V	7-7-7	"	200/60		
	A	0013W	50°55	2-3"	5.50	B2IV	7-7-7	"	200/60		
4:29	B	0027W	08°56		4.28	B3V	7-7-7	"	200/60		
4:39	C	0110W	34°00		4.96	Bo.5V	7-7-7	"	200/60		
4:41	A	0103W	40°02		2.88	Bo.5V	7-7-7	"	200/60		
4:58	B	0051W	50°55		5.50	B2IV	7-7-7	"	200/60		
5:09	C	0106W	08°56	2-3	4.28	B3V	7-7-7	"	200/60		

103

Date Sept 29-30/75 Observer Hd - BW Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39975	HD 190658	20 00.9	+15 13	G12	IIaO e	13/03	62°F	18 57	22:23	A	
39975T	Cal Step Wedge		90 sec		IIaO e			:			
39976	HD 10516	01 37.4	50 11	"	IIIaJ e	13/05	58°F	22 35	22 53	B	

Dome Temp.
Focus
Dome Temp.

Dome Temp. 61°F H=91%

Transparency Conditions Hazy - cloud

Focus 30 - R

Dome Temp. 58°F H=82%

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
11	1	02 29W	+15° 34'	2"-3"	6.3α	Mz-Iz	7-7-7	Hd SE	400/198	clouds (intermittent)	3 wide
					3.95	Bcp	2-2 (refiltered)	Hd SB	40/11	Cut off by clouds. Patch development.	
53	P	I 34 E	50 38	2						↳ eper	wide
										aJ on r.h.s. box #6	

Property of Lick Observatory

185

Date Sept 30/Oct 1 Tuesday/Wed. 75 **Observer** [illegible] **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39774	ADS 10288	16 55.1	+47° 31'	G43	IIa-O	D1.3	63°F	19:15	21:12	A	04 HW
39777T	Cal Step Wedge		90 sec		IIa-O						
39778	61 Cyg A	21 02.9	+38° 15'	G43	IIa-O	13 1.3		21:20	21:36	B	01 HW
39778T	Cal Step Wedge		90 sec		IIa-O						
39779	61 Cyg A	21 02.9	+38° 15'	G43	IIa-F+2	13 1.3		21:42	21 53	C	01 HW
39779T	Cal Step Wedge		5 min		IIa-F+2						
39780	61 Cyg A	21 02.4	+38 15	G43	IIa-O	D1.3		21:55	22 01	A	01 HW
39781	HD 1326	0 12.7	+41 23	"		"	60°F	22:13	22 31	B	00 HE
39782	HD 12029	2 05.0	+29 39	G12	IIa-O+2	D1.3	60°F	23:50	00 [illegible]	C	01 HE

Dome Temp.
Focus 15
Dome Temp.

Dome Temp. 68°F H=71%

Transparency Conditions 5. Haze → Clear

Focus 15-R

Dome Temp. 61°F H=92%

Box #2

Ending Time E.S.T	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		04 34W	+47° 50'	1-2	6.8	K8	3-3-3	Asm-Sp	2m / 64	ADS 10288 } Fwsh !!! lon 1. h.=.3	
		00 51W	+37° 45'	2	6.1	K5V	3-3-3	"	300 / 40	"	
		01 06W			6.1	K5V	NO FILTER 2-2-2	"	400 / 400	Whatman 8 film } B-V or n.b.	
		01 15W			6.1	K5V	2-2-2	"	2000 12	"	
		00 24E	+46° 57		9.4	M2V	3-2-2	"	200 / 90	"	
		01 13E	+29° 21'	1-2	6.6	K3V	3-3-3	Sh.V Ad	200 / 47	Clouds } Fwsh (lon 1.h.=.3)	

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new batch IIIaJ emulsion

Hd - Ri

Date Wed Oct 1-2 1975 **Observer** **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39983	HD10516	01h37.4	+50°11'	B-12	IIIaJ-E	13/.5	55°F	22:17	23:48	A	0h35E
39983T1	cal step wedge				IIIaJ.E	180cm					Du
39984	19374	03h1.8	+17°30	G-12	IIaOe	20/.5	54°F	00:10	00:27	B	0h15E

Dome Temp.
Focus 3.0 R
Dome Temp.

Dome Temp. 50°F 85%

Focus 30 R

Dome Temp. .....

Transparency Conditions clouds with poor seeing

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01432E	+50°38	5	3.95	B0p	22-22-22	Hd 5 Bri	40/53	mid N side of Bar #3	Fine
Dew	7 min ○ 06° = D19							" " "	
0215G	+17°54'	5	6.06	B2V	7-14	Elliptical	400/32	clouded out	

109

#1

Date Thurs Oct 2-3 1975 **Observer** Lee-Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39985	HD 170000	18 22.2	+71 17	G12	IIaJe	9/1.5	46°F	18:59	19:40	A	01°45W
39986	HD 185423	19 33.8	+3 09	"	IIaDe	13/1.5		19:49	20:24	B	01°13W
39987	HD 185423	19" 33.8	+03° 09'	G-12	IIa O-E	13/1.5		20:26	21:05	C	0°54W
39988	"	"	"	"	"	"		21:07	21:45	A	02°34W
39988T1	cal step wedge for plates 39985-				IIIaJ.5	180 sec					
3998872	cal step wedge for plates 39986 - 39996				IIa O-E	90 sec					
39989	HD 185423	19" 33.8	+03° 09'	G-12	IIa O-E	13/1.5		21.46	22:25	B	03°15W
39990	HD 185423	19" 33.8	+03° 09'	G-12	IIa O-E	13/1.5		22:27	23:10	C	04°03W
39991	Nova Cyg 75'	21 10.9	+47 58	G12	"	20/1.5		23:16	01:26	A	04°43W
39992	HD 19374	3 1.8	+17 30	G-12	"	20/1.5		01:33	01:47	B	00°51E
39993	"	"	"	"	"	"		01:50	02:03	C	02°35E
39994	"	"	"	"	"	"		02:05	02:18	A	04°E
39995	"	"	"	"	"	"		02.19	02:32	B	01°55E
39996	"	"	"	"	"	"		02:34	02:46	C	02°39W
39997	"	"	"	"	"	"		02:48	03:00	A	5°22W
39998	"	"	"	"	"	"		03:02	03:15	B	8°36W

Dome Temp.
Focus 50R
Dome Temp.

Dome Temp. 42° H=71%

Focus 50R

Dome Temp. .....

Transparency Conditions ...good nice and clear...

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Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01h45w	+71° 24'	4	4.18	AoSi	22-22-22	Sp Bin-Blg	40/74	right side of Box #3	Strong very Sl.
01h13w	+03° 27'	3-4	6.36	B4	7-7-7	β Capricei	400/120		Fine
01h54w	+03° 27'	3	6.36	B4	7-7-7		400/120		Fine Slight
02h34w			"	"	7-7-7	"	400/120		Fine
Dec 7 min ... = D19								right side of Box #3	
Dec 9 min ... = D19									
03h15w	+03° 27'		6.36	B4	7-7-7	"	400/120		Fine
04h00w	03° 27'		6.36	B4	7-7-7	"	400/100		Fine Slg
04 42w	48° 08'		~7	NOVA	7-7-7	NOVA	400/240		
00 52E	+17° 54'		6.06	B2V	7-7-7	β Capricei	400/120		Fine ✕ Slg wing
00h35E	"		"	"	7-7-7	"	400/120		Fine
00h21E	"		"	"	7-7-7	"	400/120		Fine
00h05E	"		"	"	7-7-7	"	400/120		Fine
00h08w	"		"	"	7-7-7	"	400/120	Border 2 pieces many pieces	Fine?
00h32w	"		"	"	7-7-7	"	400/120		Fine
00h36w	"		"	"	7-7-7	"	400/120		Fine

#2

the new box of plates was used for only 1 & 1/2 hr

Date Thurs Oct 3 1975 and 4 **Observer** Lee-Ri **Julian Day**

Dome Temp.
Focus 5.2
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
39999	HD 19374	03:01.3	+17°30	G-12	IIIa O-E	20/.5		03:17	03:29	C	0°7W
40000	"	"	"	"	IIIa O-E*	"		03:30	03:45	A	0°46W
40000T1	cal step wedge for plate 39997-39999				IIIa O-E	90 sec		Dew Pat cal 3		D19	
40000T2	cal step wedge for plate 40000-				IIIa O-E*	90 sec					
40001	HD19374	03h01.3	+17°30	G-12	IIIa O-E*	20/.5		03:46	04:02	B	0°17W
40002	" "	"	"	"	"	"		04:03	04:19	C	0°41W
40003	"	"	"	"	"	"		04:20	04:35	A	1°3W
40004	"	"	"	"	"	"		04:36	04:51	B	0°59W
40005	"	"	"	"	"	"	37°	04:52	05:10	C	0°47W

Dome Temp. 37° H=95%

Focus 50R

Dome Temp. .....

Transparency Conditions good clear & cold

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Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00 45 50W	+17° 54'	3	6.06	B2 II	7-7-7	β Cephei	400/120	Box # 3	Fine
01 40 6W			"	"	77-7	"	400/160	Box # 1 Broken in 2 discarded	Vs/str.
								Box # 3	"
								Box # 1	
01 11 24W	+17° 54'	3	6.06	B2 II	7-7-7	"	400/160	Box # 1	Vs/str
01 h 41 W	"		"	"	77-7	"	400/160	Broken 2 pieces	Fine
01 h 56W	"		"	"	77-7	"	400/160		Vs/strong
02 1 2W	"		"	"	77-7	"	400/160		Fine
02 43 1W	"		"	"	7-7-7	"	400/160		Fine

IIaO E 03105
IIaF E 19095

Date 023-41975 Fri - Sat **Observer** R. - Morris R. - Manchester **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40006	HD 190918	20h 02m 2	+35° 31'	G-12	IIaO-E	13/.5	54°F	19.58	20:02	A	
40007	"	"	"	G-16	IIaF-E	13/.5		20:12	23:30	B	
40007T1	cal step wedge for plates 40007,				IIaF-E	5 min					
40007T3	cal step wedge for plates 40006, 08				IIaO-E	90 sec					
40007T2	cal step wedge for plates 40009,				IIaJ-E	180 sec					
40008	NOVA Cyg 75	21h 10.9	+47° 58	G-12	IIaO E	20/.5		23:37	01:30	C	
40009	HD 217675	22h 57m 19s	+41° 47	G-12	IIaJ E	9/.9		01.37	02:04	A	
40010	HD 217675	22h 57m 19s	+41° 47'	G-16	IIaF-E	9/.5		02:10	02:34	B	
40011	0 Per HD 10516	01h 37 4	+50° 11'	G-16	IIaF-E	9/.5		02.43	03:03	C	
40012	0 Per HD 10516	01h 37.4	+50° 11'	G-12	IIaJ-E	9/.9		03:11	03:37	A	
40013	63 And HD 14392	02h 14m.4	+45° 42'	G-12	IIaO-E	9/.9		03:45	04:37	B	
40014	σ Ori E HD 37479	05m 33.7	-02° 39'	G-12	IIaO-E	13/.5		04 45	05:23	C	
40015	σ Ori HD HD 37468	05h 33.7	-07° 37	G-12	IIaJ-E	13/.5		05. 27	05.40	A	

Dome Temp. 60°F 73%

Focus 4.0R

Dome Temp. 50°F 97%

Transparency Conditions Good

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00h29m W	+35°50	2-3	7.60	WN4 O9.5V	7-7-7 to fatter	Sp Bw - Bb	800/440		
03h57m W	+35° 50		"	"	5-5-5	"	400/600	middle of Box #3	
Dew	7 min			DIP				middle of Box #3	
Dew	9 min			"					
	7 min			"				right side of Box #3	
04h42m W	+45°09'	2		Nova	8-8-8	Nova	400/240	BROKEN 2 PIECES	
03h34m W	+42°18'	2	3.63	B6p	25-25-25 to fatter	Sp Bw - Bb	40/120	right side of Box #3	
04h05m W	"		"	"	5-5-5	"	40/100	middle of Box #3	
01h52m W	+50°38	2-3	3.95	B0p	5-5-5	"	40/100	middle of Box #3	
02h26m W	+50°38		3.95	B0p	25-25-25	"	40/120	right side of Box #3	
02h48m W	+50°07'	3	5.44	ApSi	8-8-8	"	200/150	BROKEN 2 PIECES	
00h19m W	-02°30		6.32	B3p	8-8-8	"	400/140	BROKEN 2 PIECES	
00h35m W	-02°30		3.51	B9.5V	25-25-25	"	40/70	right side of Box #3	

IIaO-E 02105
IIaO-E + 05105

Date Oct 5 & 1975 San Ma... **Observer** G. P. Li... L. **Julian Day** .....

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40016	HD193656	19h25.6	+03°14'	G-12	IIaO-E	13/.5	60°F	19 06	19:48	A	
40017	Hr. [illegible]	[illegible]	[illegible]					19:54	20:19	B	
40017T1	cal [illegible]	[illegible]	[illegible]23				90sec				Dev 9
40018	HD 21803	3h25.8	+44 32	G-12	IIaO-E	20/.5	57F	23:41	00:26	C	02h 32E
40019	"	"	"	"	"	"		01:49	02:10	A	00h 7E
40020	"	"	"	"	"	"		02:12	02:43	B	00h 9E
40021	"	"	"	"	"	"		02:46	03:11	C	00h 2W
40022	"	"	"	"	"	"		03:12	04:09	A	01h 1W
40023	"	"	"	"	"	"		04:15	04:51	A	00h 7W
40024	"	"	"	"	IIaO-E*	"		04:52	05:26	B	00h 35W
40024T1	cal step wedge for plate 40024				IIaO-E	90sec	57°F				

Dome Temp. [illegible]

Focus 30 R

Dome Temp. 60°F 93%

Transparency Conditions Clear with scattered clouds

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Ending Time E.S.T	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		00+57W	+03° 31'	3+	6.1	A0	~~10-10-10~~	Shell	40/200		
		00+42W	+15°55		7.5	A2	10:0-10	"	40/150		
		Dew 9 mi @ 69°F			019						
00:36	C	02h 33m E	+14°52		6.4	B7 IV	7-7-7	β Cephei	400/91	clouded out	w.k
02:10	A	00h 40m E	"		"	"	7-7-7	β Cephei	400/120		sl w k
02:43	B	00h 09m E	"		"	"	7-7-7	"	400/120	Fine Dust of Guiding	
03:14	C	00h 20m W	"		"	"	7-7-7	"	400/120		FINE
04:09	A	01h 19m W	"		"	"	7-7-7	"	400/120		sl wk
04:51	A	02h 00m W	"		"	"	7-7-7	"	400/120		v sl wk
05:26	B	02h 35m W	"		"	"	7-7-7	"	400/120	new box of Plates 05105	v s/wk

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IIaO-05105

Dome Temp.
Focus
Dome Temp.

Date Oct 6-7 1975 Mon Tues **Observer** MR-Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40025	HD187279	19h44.1	+31°15'	G-12	IIaO-E	9/.5	60°F	18:45	20:35	A	
40026	HD208704	21 49.4	+27 53	G-12	"	"		20:41	22:14	B	
40027	HD221114	23 24.1	+15 28	G-12	"	"		22:19	00:15	C	
40027T1	cal step wedge for plates 40025-				IIaO-E	90sec					
40028	HD7374	01" 08.8	+15° 36	G-12	IIaO-E	9/.5		00:20	00:59	A	
40029	HD14685	02" 17.1	+16° 25	G-12	IIaO-E	9/.5		01:03	02:49	B	
40030	HD23862	03° 43.3	+23° 51	G-12	IIaO-E	9/.5		02:53	03:19	C	
40031	HD26971	04" 27.0	+22° 09	G-12	IIaO-E	9/.5		03:23	04:06	A	
40032	HD51419	06" 52.2	+42° 26	G-12	IIaO-E	9/.5	47°F	04:12	05:30	B	

Dome Temp. 58°F 65%

Focus 30R

Dome Temp. 44°F 86%

Transparency Conditions very good

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1:30W	+31° 34'	3	6.65	A0	8-8-8	Am-MR	400/180	BOOKEN 2 pieces capped 4hr for a group	
01"03W	+28° 50'	3	6.77	A3	8-8-8	"	400/180		
01"30W	+16°-00		7.04	A2	8-8-8	"	400/180		
00"30W	+16°17°	3	5.80	B8	888	Ap-MR	400/180		
01"11W	+16° 54'		6.78	A2	888	Am MR	400/180		
00"15W	+24°11'		5.1	B8p	888	sl. cl *	400/210		
00"39W	+22°29'		6.11	B8	888	Ap- MR	400/180		
00"45E	+42°25	3-4	6.61	A0	888	Ap-MR	400/185		

IIaO-05105

H₂O to DDs (correction 3h 17m)

Date Oct 7-8 1975 Tues Wed **Observer** Hd-Ri/Ri-Dr **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40033	NOVA Cyg 1975	21h10.9	+47°58	G-12	IIaO-E	20/5	52°F	18:46	20:33	A	00h31
40034	HD223094	23 41.5	28 09	"	"	13/3		20 49	21 41	B	E
40035	HD 218634	23 04.5	+8 08	"	"	13/3		21 51	22 19	C	E
40036	HD223094	23 41.5	28 09	"	"	13/3		22 21	23:17	A	00h18
40037	HD10516	01h37.4	+50°11	G-12	IIIaJ-E	9/9		23:24	23:53	B	01h02
40038	HD 12029	01h53.0	+28°54	G-12	IIaO-E	13/3		0000	01:10	C	01h00
40038T1	cal step wedge for plate 40037				IIIaJ-E	180 sec					
4803872	cal step wedge for plate 3003-16,38-				IIaO-E	90 sec					
40039	HD149769	02h19.7	+29°26	G-12	IIaO-E	13/3		01 13	01 55	A	01h01
40040	HD 23169	03h37.9	+25°29	G-12	IIaO-E	13/3		01 59	03 50	B	01h54
40041	HD65934	07h56.1	+26°55	G-12	IIaO-E	13/3	47°F	0356	05 25	C	1h01

Dome Temp.
Focus 40
Dome Temp.

Dome Temp. 54°F 80%

Focus 40R

Dome Temp. 48°F 95%

Transparency Conditions ...

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00h09W	+48°07	3			8-8-8	NOVA	480/240		
E 1h16	28 40	2	8.97	G-OV	8-8-8	Hd SSV	800/240	broken 2 pieces	Fine
E 3m	8 40	2	6.6	M2III	8-8-8	Bl Watson	480/240		sl strong
00h18W	+28°40'	2-3	8.97	G0V	8-8-8	Hd SSV	800/240		v sl wk
01h02E	+50°38		3.95	B0p	25-25-25		40/120	night side of Bay	
00h00	+29°21	2-3	8.96	K2III	888	Hd SSV	800/240		sl wk
								night side of Bay	
00h19W	+29°53'	2-3	8.96	K3III	888	Hd SSV	800/240	Plate stained.	Fine
00h55W	+25°47	"	9.39	G2V	888	"	800/240		v sl wk
1h17E	+26°48'	"	8.87	G5III	88	"	800/120	some cirrus clouds for SW	sl weak

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Date OCT 12/13/25 SUN/MON Observer TNR - TN Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40042	NOVA - 16 - 25	21h 10.9	+47°58'	G12	IIa-O	20/4	55°	21:27	23:25	A	03:44
40042T	"	"	"	"	"	"	"	"	"	"	"
40043	HD 28052	4h 20.6	+15°23'	G10	"	13/5	"	23:29	03:57	B	03:E
40044	HD 28710	4 28.2	+14 38	"	"	"	"	00:01	00:22	C	01:44 E

Dome Temp.
Focus
Dome Temp.

Dome Temp. 58°F H= 90%

Focus 40-k

Dome Temp. .....

Transparency Conditions Clearing by 21h - haze

122

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
[illegible]		03 21W	+49° 09'	2-3	8	[illegible]	6-6-6	NovA C/G	400/123	[illegible]	Fine gdy bad
										"	"
[illegible]		03 21 E	+15° 41'	3-4	4.74	FoI	8-8-8	Tau Hyad Eq	240/20	[illegible]	Fine
[illegible]		03 04 E	+14° 55'	"	4.89	A8	8-16	"	300/20	[illegible]	wk
										Bad Fe (dbl)	

123

IIa0-e 07094 08105

Date ..... **Observer** ..... **Julian Day** .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40045	HD 6582	1 13.8	+20° 17'	51"	IIa 0-e	13.5	62°F	1945	21:00	M.
40045 T	Cal stop	wedge	90sec		1					
	Tested	SIT	system					23	01	
	B Aric									
	& Cet AB									

Dome Temp.
Focus 20
Dome Temp.

Hour Angle End
0202W

Dome Temp. [illegible]

Focus 20-R

Dome Temp. .....

Transparency Conditions Clear till 21h

Ending Time E.S.T	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1:00		0202W	[illegible]	[illegible]	[illegible]	[illegible]	18-5	[illegible]	192	TV GUIDED Volk 3.5 Fine	
					V						←
2'										Major clouds	

125 #1 Old batch cal 19095 * New Batch IIaF 03075 17105
evacuated only 2 hrs

Date Oct 16-17 1975 Thurs-Fri **Observer** Sho-Tm **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40046	Algol HD19356	03 01.7	+40 34	G16	IIaFe	9/.9		00 08	00 :44	A	
40046T	Cal step wedge for 40046-51				"	5 min					
40047	Algol	03 01.7	+40 34	G16	"	9/.9		00:45	01:05	B	
40048	Algol	"	"	G16	"	9/.9		01:06	01:25	C	
40049	"	"	"	"	"	"		01:26	01:43	A	
40050	"	"	"	"	"	"		01:44	02:12	C	
40051	"	"	"	"	"	"		02:14	02:38	A	
40052	Algol	03 01.7	+40 34	G16	IIaFe*	9/.9	47°F	02:40	03:03	B	
40052T	Cal step wedge for 40052-60				"	5 min					
40053	Algol	03 01.7	+40 34	G16	"	9/.9		03:04	03:19	C	
40054	"	"	"	"	"	"		03:20	03:36	A	
40055	"	"	"	"	"	"		03:37	03:53	B	
40056	"	"	"	"	"	"		03:54	04:08	C	
40057	"	"	"	"	"	"		04:09	04:24	A	
40058	"	"	"	"	"	"		04:25	04:39	B	
40059	"	"	"	"	"	"		04:40	04:56	A	

17105

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Dome Temp. 47°F H=85%
Focus 20-R - 50-R changed for 10052
Dome Temp. .....

Transparency Conditions Very cloudy with holes - Excellent by 2h

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1:44	A	01 00 E	+40 57	2-3	2.2-3.3	B&V	no filter 4-4-4	Rad. Star	40/200		Fine guiding
											✓
11:55	B	00 39 E			2.2-3.3	B&V	4-4-4	Rad. Star	40/200	Broken Spc	Fine gdg
25	C	00 19 E			"	"	4-4-4	"	40/200	Complete Discard	Fogged
11:43	A	00 01 E			"	"	4-4-4	"	40/206		Fine
12:12	B	00 28 W			"	"	4-4-4	"	40/205		Fine
2:38	A	00 54 W			"	"	4-4-4	"	40/201	Starting from left box	Fine
3:03	B	01 19 W			"	"	4-4-4	"	40/215	—	Fine sl gdg
											✓
3:19	C	01 35 W			"	"	4-4-4	"	40/215	maybe fog?	Fine gdg
3:46	A	01 53 W		2	"	"	4-4-4	"	40/215		Fine sl gdg
4:53	B	02 09 W	+40 58	2	"	"	4-4-4	"	40/215		Fine sl gdg
5:19	C	02 24 W		2-3	"	"	4-4-4	"	40/223	Note Ag extra plate	Fine v d gdg
5:24	A	02 40 W			"	"	4-4-4	"	40/215	moving in PHC	Fine sl gdg
5:39	B	02 55 W			"	"	4-4-4	"	40/211	[illegible]	Fine sl gdg
5:56	A	03 12 W			"	"	4-4-4	"	40/215		Fine

12[7] #2

** from Box #2 with Test Tag

Date Oct 16-17 **Observer** **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40060	HD 10516	01 37.4	+50 11	G16	IIaF e*	9/.5	44°F	05 00	05 46	B	05 27
40060F	Focus Test			G12	IIa-J-e**	9	44°F			B	

Dome Temp.

Focus

Dome Temp.

Dome Temp. ..... Transparency Conditions Excellent

Focus .....

Dome Temp. 40°F H=82%

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
5:46	B	05 27 W	+50 39	3·6	3.95	Rsp	5-4-4	Spin-dl	45/110		v dark sl sdg
	P		Also Test for Fog etc					set 50-R	20/20	initiated	v sl red sl Fog
											L
										X Warren	
										More Naf need	
										Cutting Tg	

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Emulsion 03075 17105

Date Oct 20-21/Nov Tue 1905 Observer Shc. Tu Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40061	HD19356	03 01.7	+40 34	G16	B-F-C	9/19	50° F	01 47	01 58	A
40061 T	Cal step	wedge	5 min		"					
40062	Algol	03 01.7	+40 34	G16	"	9/19		01:59	02:44	B
40063	"	"	"	"	"	"		02:46	03:20	C
40064	"	"	"	"	"	"		03:21	03:40	A
40064 T	Cal step	wedge	For 40064		"	Focus				

Dome Temp.
Focus
Dome Temp.

Hour Angle End

Dome Temp. 55°F H=93 3

Focus 50-R

Dome Temp. .....

Transparency Conditions clouds

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
20 30W	+40 57	2 3	2.2-3.3	B&L	5-5-5	Rad. Star	10/205	Open [illegible]	dbl Fe
Dew D19	6min	@ 63°F							✓
01 16W	+40 57				5-5-5	Rad. Star	10/185	clouds	Fine
01 21W	"	"	"	"	5-5-5	"	10/[illegible]	clouds	sl sag
02 12W	"	"	"	"	5-8	"	10/63	dbl push * with Col * of Fo. Field Box #6	sag sl wk
Dew D19	8min	@ 63°F							✓

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IIaF 03075
IIaOE 07094–08105

Date Wed-Thurs 22-23 1975 **Observer** Sh.-Ri.-McG **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40065	Algol HD 19356	03h 01.7	+40 34	G-16	IIaF	9/.9	58°F	00.56	01:12	A	
40066	"	"	"	"	"	"	"	01:13	01:35	B	
40067	56 Ari	03h 6m.3	+26 53	G-12	IIaO-E	9/.5		01:52	02:45	C	
40067T1	cal slop wedge for plates 40065-66, 71, 72				IIaF	5min		Dev 6min @ 66°F		DIS	
40067T2	cal slop wedge for plate 40067-70				IIaOE	90sec		D19 @ 68°F 9min			
40068	56 Ari			G-12	IIa-O-E	9/.5		02:46	03:29	A	
40069	HD19832			"	"	"		03:30	04:11	B	
40070	"			"	"	"		04.12	05:03	C	
40071	Algol	03h01.7	+40°34	G-16	IIaF	9/.9		05:12	05:32	A	
40072	"	"	"	"	"	"	54°F	05:33	06:01	B	

Dome Temp. 56°F 89%

Focus 30R

Dome Temp. 56°F 90%

Transparency Conditions Thin cloud + haze good after 03 h

IIaF plates were cut to long had to cut 1/8 in. off all the plates

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
5 12	A	00h09E	+40°57'	4	2.2 3.3	B8V	H2O filter 5-5-5	Radio Stn	40/208	west side of Box	st grg Fine
01.35	B	00h16W	"		"	"	5-5-5	"	40/205	west side of Box	Fine
02 45	C	01h20W	+27°17'			B9V	Ap 10-10-	Ap/HeSi	400/160		Fine
										west side of Box	L
5 9 min		26 Oct 1975									↙
03 29	A	02h05W	27°17'				10-10-10	Ap/HeSi	400/161		Fine
04 11	B	02h46W	"				10-10 10	"	400/260		Fine
5 36	C	03h39W	"				10-10 10	"	400/136		v sl wk
5 32	A	04h12W	+40°58'		2.2 3.3	B8V	H2O filter 5-5-5	Radio Stn	40/203	west side of Box	Fine
04 37	B	04h40W	"		"	"	5-5-5	"	40/206	" — partial eyp. to moonlight	Fine

T73

IIaO E-07094-08105 IIaF-E 03075-24105
IIIaJ-E July 75

Date Thu Fri 23-24 1975 **Observer** eb-R **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
40073	Algol HD19356	03h01.7	+40°34	G-12	IIaO-E	9/.9	65°F	18'46	18:53	A
40074	Algol	"	"	"	IIIaJ-E	9/.9		18:56	19:20	B
40075	"	"	"	"	"	"		19:23	19:45	C
40076	"	"	"	G-16	IIaF-E	9/.9		19:52	20:19	A
40077	"	"	"	"	"	"		20:21	20:42	B
40077T1	cal step wedge for plates 40076-81				IIaF-E	5 min		Dev in D19 68°F		
40077T2	cal step wedge for plates 40074,75,82-84				IIIaJ-E	180 sec		" "	" "	
40077T3	cal step wedge for plates 40073 85-89				IIaO-E	90 sec		D19 @ 68°F 9 min		
40078	Algol	03h01.7	+40°34	G-16	IIaF-E	9/.9		20:44	21:05	C
40079	Algol	"	"	"	"	"		21:07	21:26	A
40080	"	"	"	"	"	"		21:27	21:50	B
40081	"	"	"	"	"	"		21:51	22:11	C
40082	"	"	"	G-12	IIIaJ-E	9/.9	58°F	22:20	22:32	A
40083	"	"	"	"	"	"		22:34	22:45	B
40084	"	"	"	"	"	"		22:49	22:59	C
11085	56 Nii HD19832	03h06m.75	+26°53		IIaO-E	9/.5		23:06	23:50	A

Dome Temp. 6
Focus 12
Dome Temp.

Hour Angle End

Dome Temp. 62°F 85%

Focus 10R

Dome Temp.

Transparency Conditions good

Ending Time E.S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
8 53	A	06h25E	+40°56'	4	2.2 3.3	B8V	10-10 10	Radio Std	40/30		g d g
1.20	B	05h58E	"		"	"	25-25-25	"	40/120	right side of exposed Box #6	s l wk g d g
1 45	C	05h33E	"		"	"	25 25 25	"	40/120	right Side of Box #6	s l wk g n g
2 9	A	04h58E	"		"	"	no fits 5-5-5	"	40/201	middle of Box #6	s l g n g
2 32	B	04h34E	"		"	"	5-5-5	"	40/207	middle of Box #6	g n g
		0 d 27								middle of Box #6	"
										right side of Box #6	"
9 min		26	Oct 1975								"
35	C	04h12E	+40°56'		2.2 3.3	B8V	5-5-5	Radio star	40/203	middle of exposed Box #6	V s l g n g Fine
2.20	A	03h51E	"		"	"	5-5-5	"	40/200	middle of exposed Box #6	g n g splotchy
2 50	B	03h27E	"		"	"	5-5-5	"	40/206	middle of exposed Box #6	Fine
3 11	C	03h07E	"		"	"	5-5-5	"	40/213	middle of exposed Box #6	g n g
2.52	A	02h45E	"	2	"	"	25-25-25	"	40/125	right side of exposed Box #6	s l Fog g n g
2.45	B	02h32E	"	2			25-25-25	"	40/124	right side of exposed Box #6	bad g n g
2.59	C	02h19E	"	2°			25-25-25	"	40/130	right side of exposed Box #6	v bad g n g
3.50	A	01h31E	-27°15'		5.65	Rop	10-10 10	Rho/Rho Sc	400/160	some focusing trouble //	Fine

Date Thurs Fri Oct 23-24 1913 cont Observer Sho-Ri Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40086	56 Ari HD19832	03h 6m .9s	+26° 58'	G-12	IIa-F	9/5		23:54	00:43	B	10h 59m
40087	HD19832	"	"	"	"	"		00:44	01:30	C	0h 7m
40088	"	"	"	"	"	"		01:31	02:20	A	1h 7m
40089	"	"	"	"	"	"	58°F	02:21	03:10	B	01h 50m

Dome Temp.
Focus
Dome Temp.

Dome Temp. ..... Transparency Conditions ..... foggy .....

Focus .....

Dome Temp. ..... 60°F 98%

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
.. 43	3	00h38E	+27°15'		5.62	Prop	10-10 10	Ap/Hk Si	400/180		
.. 10	1	00h05W	"		"	"	10-10-10	"	400/170		Fine
.. 30	4	01h00W	"		"	"	10-10 10	"	400/170		Fine
.. 10	3	01h50W	"		"	"	10-10 10	"	400/170	cloud + fog (warp off	4000 Å Fine

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Date Fri - Sat Oct 24-25 1975 **Observer** Wehrenberg R; Warner R **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40090	HDE 226868	19h 54.6	+34°56'	G-12	IIaO-E	25/.3	66°F	18 :15	23:17	A	
40091	HD 217675	22h 53m 9s	+41°47'	G-12	IIaJ-E	9/.9		23: 25	00:04	B	
40092	"	"	"	G-16	IIaF-E	9/.5		00. 09	00:38	C	
40093	63 And HD 11392	02h 14m.1	+49°42	G-12	IIaO-E	9/.9		00 54	01:51	A	
40093T1	cal step wedge for plates 40092				IIaF-E	5 min		Dev 7 min	@66°F DA		
40093T2	cal step wedge for plates 40091				IIIaJ-E	180 sec		Dev 7 min	@66°F DA		
40093T3	cal step wedge for plates 40090, 93-94				IIaO-E	90 sec		Dev 9 min	@63°F DA		
40094	HD 25363	04h 03m.3	+15°57	G-12	IIaO-E	9/.3	60°F	01:58	03.12	B	

Dome Temp. 65°F 80% IIa O-E 07094-08105
IIa J-E July 75
IIa F-E 03075-24105

Focus 20R

Dome Temp. 64°F 94%

Transparency Conditions hazy with some clouds

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
05h14m W	+35° 15'	3	9.74	09.7 Ib	888	Sp Bri-Bk	800/300	some cirrus clouds	wk s. shift Fe
03h56m W	+47° 18'		3.63	B6p	252525 no fields 5-5-5	Shell *	40/120	right side of exposed Box # 2	sl Fog grng
03h32m W	"		"	"		"	40/100	middle of exposed Box # 2	Fine
01h26m W	+50°07		5.44	ApSi	888	Ap Bk	200/160		Fine
0h27								middle of exposed Box # 2	"
"								right side of Box # 2	"
"									"
05h40m W	+16° 14	3	7.14	F8	8 16	Sp Bri-Bk	400/58	clouds	wk

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IIaO-E 07094-08105, 07094-24105
IIaF - 03075

Date Dunn Oct 26-27/75 **Observer** Hd / Sho, Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40095	HD186547	19 39.9	B 04	G16	IIaF	13/3	52°F	18 02	20.15	A	2h33W
40096	56 ARi	03h 06.3	+26°53	G-12	IIaO-E	9/.5		20:29	21:32	B	03h36E
40097	HD 19832	"	"	"	"	"		21:35	22:30	C	04h40E
40097T1	cal step wedge for plate 40097-96				IIaO-E	90 sec		D19@ 68°F 9 min			2h33
40098	56 ARi	03h 06.3	+26°53'	G-12	IIaO-E	9/.5		23:14	00.02	A	0h40E
40099	"	"	"	"	"	"		00.03	00:56	B	0h36E
40100	"	"	"	"	"	"		00:57	01:44	C	00h50W
40100T1	cal step wedge for plate 40098				IIaO-E	90 sec		Dw 9 min	D19@ 68°F		0h27W
40100T2	cal step wedge for plate 40099-				IIaO-E	90 sec		" "	"		"
40101	56 ARi	03h 06.3	+26°53	G-12	IIaO-E	9/.5		01.48	02.30	A	0h27W
40102	HD 23862	03h 43.3	+28°51	G-12	IIaO-E	9/.5		02 33	03.00	B	1h11W
40103	56 ARi	03h 06.3	+26°53	G-12	IIaO-E	9/.5		03:05	03:55	C	0h46W
40104	"	"	"	"	"	"		03:56	04.43	A	0h55W
40104T1	cal step wedge for plate 40095				IIaF	5 min		Dw 5 min @ 68°F			
40105	56 ARi	03h 06.3	+26°53	G-12	IIaO-E			04:44	05:03	B	

Dome Temp. 52°F 70%

Focus 500R

Dome Temp. 32°F 100%

Transparency Conditions

Ending Time E.S.T	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
5		00h33w	13 23	2	6.1	B8IV	no filter 5,5,5	Itd SB	200/200	middle of Box #4	
32		03h36E	+27°15'		5.65	B9Vp	10-10 10	He, Si Progs.	400/200		Fine
30		02h40E	+27°15		"	"	10-10 10	"	400/220		Fine
		26 Oct 1975									⌐
		01h08E	+27°15'		5.65	B9Vp	10-10-10	He, Si prog.	400/210		Fine
		00h14E	"		"	"	10-10-10		400/210	new box	
		00h35w	"		"	"	10-10,0		400/210		Fine
		Oct 27 /75									⌐
		"									⌐
		01h20w	+27°15'		5.65	B9Vp	10-10 10	He Si	400/210		Fine
		01h41w	+24°10'	2	5.1	BBp	10-10-10	GI Shell	400/210		Fine
		02h46w	+27°15'		5.65	B9Vp	1010 10	He Si	400/210		Fine
		03h35w	"		"	"	10 1010	"	400/205		Fine
										middle of Box #4	✓
			+27°15'		5.65	B9Vp	10 20	"	400/43	Done dripping wet	wk Fe wk too

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Date WED/THU OCT. 29/30/25 **Observer** Inr-In **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40106	HD 185859	$19^h 36^m.1$	$+20^\circ 15'$	G43	IIa O-E	13/.4	44°F	20:12	21:08	A	02 42 W
40107T	Cal step wedge		90sec		"						
40107	HD 23862	03 43.3	+23 51	G12	"	9/.5		21:21	22:15	B	03 19 E
40108	HD 28052	04 20.6	+15 23	G12	"	9/.3		22:39	23:10	C	03 01 E
40109	HD 28910	04 28.2	+14 38	G12	"	9/.3		23:37	00:10	A	02 29 E
40110	HD 28226	04 22.1	+21 24	G12	"	"		00:15	01:11	B	01 01 E
40111	HD 27483	04 15.2	+13 38	"	"	"		01:14	02:27	C	00 24 W
40112	HD 30869	04 46.2	+13 29	"	"	"		02:30	03:43	A	01 07 W

Dome Temp. +4
Focus 69
Dome Temp. 3

Dome Temp. +40°F H=75%

Focus 60-R

Dome Temp. 30°F H=85%

Transparency Conditions Very windy & cloud in west NE 142

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
08	A	03 42W	+20°31'	5-10	6.9	BasIa	2-2-2	Tnr-Vnl OR	400/65		Fine
		Dm D.9 9mi @ 63°F									✓
15	B	0319 E	+24 08	4-8	5.1	B8p	7-7-7	Gl -Shell	400/210		Fine
10	C	03 01 E	+15 40	3-5	4.74	FoV	7-7-7	Hyad Bin.	200/70	some cloud	Fine
10	A	02 08 E	+14 53	"	4.90	A8In	7-7-7	"	200/70	cloud	Fine
11	B	01 01 E	+21 40	"	5.99	Am	7-7-7	"	200/70		Fine
29	C	00 21 W	+13 55	"	6.63	F6V	7-7-7	"	400/140		Fine
3-3	A	01 07 W	+13 44	"	6.77	F5	7-7-7	"	400/109	some cloud - much cloud	s/wk

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IIa-O-e 07094
IIIa-J-e 24105

Date THU/FRI OCT 30/31 '75 **Observer** Inv-In **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40113	HD186980	19 42.4	+31 52	G43	IIa-O-e	13/.35	38°F	18:37	19:04	A
40114	BD+27°3512	19 42.6	+28 00	"	"	"		19:10	21:17	B
40114T	Cu/step wedge		90sec		"					
40115	HDE 235679	21 55.0	+54 01	G12	"	24/.5		21:29	00:39	C
40116	HD 27989	04 20.0	+18 39	"	"	9/.35		00:47	03:21	B
40117	HD 27383	04 14.2	+16 18	"	"	"		03:26	05:21	C
40118	HD37468	05 33.7	- 2 39	"	IIIa-J-e	9/.5		05:25	05:43	B
40118T	Cu/step wedge		180sec		"		30°F			

Dome Temp. 35°F H=70%

Focus 70-A

Dome Temp. 30°F 80%

Transparency Conditions Excellent

Ft Fuzzy Aurora 23h

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
[illegible]	A	01 35 W	+32 10	3"	7.6	07 S III	6-3-3	Tnr Vul OB	400/70	Fe. strong	Fine grg
2 17	B	0348 W	+28 17	2-3"	9.0	07 If	2-2-2	"	800/140		Fine
		Dev Dlg 9mm	@ 68°F		Oct 31						✓
0 39	C	05 00 W	+54 28	2"-5"-1"	9.21	B2.5 Ib	5-5-5	Sp Bin.-Bln	800/350	Bad RA Oscatn at this Angle	Fine
3 3	B	01 15 W	+18 55	2-3"	8.21	G6 V	7-7-7	Hyad Bin	400/150		Fine
2 21	C	03 22 W	+16 35	3-4	7.44	F8 V	7-7-7	"	400/150		Fine
5 43	I	02 24 W	-02 29	"	3.51	09.5 V	25-25-20	Sp Bin-Bln	90/30	cloud	sl wk
		Dev D17	7 mm	@ 68°F	Oct 31						

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Date Fri - Sat Oct 31 / Nov 1 Observer EM (MOR) - Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40119	HD217675	22 57.3	+41 47	G12	IIa-J-F	9/.9	34°F	21:31	21:58	A	
40119T	Cal step wedge		180sec		"						
40119F	Focus	Test		G12	IIa O	13	40°F			A	

Dome Temp. A
Focus 3
Dome Temp. 4

Dome Temp. 41°F H= 75%

Focus 70-R

Dome Temp. 47°F H= 77%

Transparency Conditions Hazy to Cloudy

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
-01h 38m W	+42 17	1-2	3.63	B6p	70	Shell-Bl	40/104	No Fe Arc Cloud	Fine but bad guy
	Dec 319	7mi	C	68°C	Nov 3			Arc put on 15 min after End	
A	in in / out out				5/5	no filter			v sl blue
								Nov. 3 '75	
								ARC [illegible]	
								EXT. MTR. DN'T [illegible]	
								WATER IN BATT.	

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1975

IIa-F-e 03075 27105
IIa-O-e 03094 - 31105

Date Tues - Wed Nov 4-5 **Observer** Hd-Ta-Dr **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40120	HD 186547	1939.9	+13 04	G16	IIaF-e	13/3	58°F	17 49	20 13	A	3 XW
40120T	Cal step	wedge	5 min		"	For 40120		4h 03	"		
40121	HD 202094	21 41.5	13 09	G12	IIaO-e	13/3		20 19	22 13	B	1 09 W
40121T	Cal step wedge		30 sec		"	for 40121					
40122	HD 149438	02 19.7	+29 26	G12	"	13/3		22 18	00:22	C	0 35 W
40123	HD 71567	08 17.9	+25 25	"	"	"		00:26	03:49	A	2 44 W
40124	HD 65934	07 56.1	+26 55	"	"	"		03:55	06:07	B	0 44 W

Dome Temp. 60°F H=60%

Focus 30-R

Dome Temp. 54°F H=75%

Transparency Conditions Excellent

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
3 00 W	+13 22	2-4	6.1	B8 IV	no filter 5-5-5	Pleiades Hd	200/250	3 Hr Fair right at close	Ok
Dew Dlg 5 min	@ 68°F				filter				
1 09 W	+28 40	2-4	8.97	A5 III	7/7/7	SSV	800/250	~~Excellent 2nd~~	fine
Dew Dlg 7 min	@ 70°F								
0 35 W	+29 51	2-3	8.96	K3 III	7/7/7	SSV	800/265		fine
2 44 W	+25 47	2-4	9.39	G2V	7/7/7	"	800/295		fine
0 44 W	+26 49	1-3	8.87	G8 III	7/7/7	"	800/260		fine

149 Pg #1

IIIa-J-e 24105 (July 75 batch) now

* Mistake

IIa-O-e 03094 - 31105

IIa-F-e 03075 - 27105

Date Wed-Thurs 5-6/75 **Observer** Tm-Sho **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40125	HD190918	20 02.2	+35 31	G12	IIa-O-e	13/.5	57°F	18 00	18 56	A	01 31 W
40126	"	"	"	G16	IIIa-J-e*	18/.5		19 00	20:57	B	03 33 W
40126T	Cal Step	wedge	90sec		IIa-O-e						
40127	HD19356	03 01.7	+40 34	G16	IIa-Fe	9/.9		21:06	21:22	C	03 03 E
40127T	Cal Step	wedge	5min		"						
40128	HD19356	03 01.7	+40 34	G16	"	9/.9		21:23	21:49	A	02 37 E
40129	"	"	"	"	"	"		21:50	22:08	B	02 17 E
40129T	Cal step wedge for	40126?		180sec	IIIa-J-e						
40130	HD19356 (Algol)	03 01.7	+40 34	G16	IIIa-F-e	9/.9		22:09	22 28	C	01 58 E
40131	"	"	"	"	"	"		22:30	22:46	A	01 42 E
40132	"	"	"	"	"	"		22 49	23:01	B	01 20 E
40133	"	"	"	"	"	"		23:06	23:22	C	01 19 E
40134	"	"	"	G16	IIaF e	9/.9	55°F	23:23	23:40	A	00 45 E
40135	HD14392 (63 Aurl)	02 14.4	+79 42	G12	IIIa-O-e	9/.5		00:20	01:09	A	01 31 W
40136	"	"	"	"	"	"		01:10	01:34	B	01 55 W
40137	"	"	"	"	"	"		01:35	02:09	C	02 30 W

Dome Temp. 5
Focus 30
Dome Temp.

Dome Temp. 63°F H=56%

Focus 30-R

Dome Temp. .....

Transparency Conditions Cloudy but fine seeing

* At Far right of Ex Box #6

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
9 56	A	01 31 W		>1"-2"	7.6	WN 4.5 09.5	7-7-7	NGC 6871	400/225	2" off one end (pc kept	Fine
06 57	B	03 33 W	+35 51	2"	"	"	no filter 5-4-7	"	400/455	cloud * " mistake)	not as good
		Dew No6 DIS									
01 22	C	03 03 E		1"	2.2-3.3	B&V	no filter 5-5-5	Radio Star	40/123	Algol * At Far right of Box	Fine but gng bad
		Dew								*	
1:49	A	02 37 E			2.2-3.3	B&V	no filter 5-5-5	Radio Star	40/146	Algol * min	Fine gng
2 08	B	02 18 E			"	"	no filter 5-5-7	"	40/120	*	sl wk gng
		Dew Sun DIS								* pt with U.F.	
32 28	C	01 58 E	+40 58	1"	2.2-3.3	V&V	no filter 5-6-5	Radio Star	40/120	*	V sl wk gng
2:46	A	01 42 E		"	"	"	5-5-5	"	40/130	*	sl wk gng
03 01	B	01 30 E		1"	"	"	5-5-5	"	40/124	*	v sl wk gng
32 02	C	01 14 E		"	"	"	5-5-5	"	40/137	*	Fine gng
33 10	A	00 45 E	+40 58	"	"	"	5-5-5	"	40/131	*	Fine gng
01 09	A	01 31 W	+50 08	2-3	5.4.4	Ap Si	7-7-7	Ap HeSi prog	200/65	thin cloud	Fine
01 24	B	01 55 W		"	"	"	7-7-7	HeSi program	200/65		Fine
2 09	C	02 30 W		"	"	"	7-7-7	"	200/65		Fine

VS
Pg #2

Date Nov 5-6 / 75 Observer Sho-Tag Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40138	HD14392	02 14.4	+49 12	G12	IIa-0c	9/15		02 : 18	02:47	A

Dome Temp.
Focus
Dome Temp.
Hour Angle End
03 h W

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions ..... hazy - sl fog .....

Ending Time E.S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
9 1	A	03 10 W	+50 08	2-5	5.44	ApSi	7-7-7	HeSi prog	200/45	Fog	sl wk sl 9+g

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IIa-O-e 03094 - 31105

Date Sat Sun - Nov 8 & 9 / 75 Observer F-Ta Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40139	HD 225010	23 57.5	+65 32	G12	IIa O-e	131.5	59°F	21:44	23:46	B	03 39W
40139T	Cal step	wedge	90 sec								
40140	HD 47105	06 31.9	+16 29	G12	IIa-e	9/.9		23:55	00:00	C	03 42E
40141	"	"	"	"	"	"		00:03	00:06	A	03 37E
40142	"	"	"	"	"	"		00:08	00:11	B	03 32E
40143	"	"	"	"	"	"		00:14	00:23	C	03 20E
40144T1	Calibration step		9 sec								
T2			90 sec								
T3			7 min								
T4			15 min								

Dome Temp.
Focus 30
Dome Temp.

Dome Temp. 60°F H=90%

Focus 30-R

Dome Temp. 58°F H=99%

Transparency Conditions Haze scattered cloud

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2:46	B	02 38W	+65 03	3"	7.2?	A3 III	7-7-7	Wide Vis Bin	400/140	looks for Ha & Comp Look: Tested	V sl wk
00:00	C	03 43E	+	2-3	1.93	A0 IV	12-12	Colbn std	40/48	2x	Fine V sl gag
00:16	A	03 37E					12-12		40/24	normal	Fine sl gag
00:11	B	03 32E					12-12		40/12	½ normal	Fine sl gag
00:33	C	03 20E					12-12		40/96	4x	fine

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IIa-O-e 03094 - 10115
IIIa-Je July 75 24105 s/fog

Date Mar-Jun Nov 10/11 '75 Observer MR - Tm But Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40144	HD 26571	04h 7.0m	+22° 09'	G12	IIaO-e	9/.5	52°F	22:46	00:18	A	60 52°F
40144T	Cal step wedge		90 sec		"	Dew	N2 Cont 8 min @	68°F DT			
40145	HD 43496	06h 15.4	+15° 59'	G12	"	13/.5		00 37	02:28	B	60 41E
40146	HD 51418	06 52.2	+42 26	"	"	9/.5		02 32	03:48	A	60 09E
40147	HD 76216	08 49.7	+58 36	"	"	"		03 51	05:57	B	
40148	HD 77105	08 51.4	+12 21	"	IIIa-J-e	9/.9		06 03	06 22	C	
40149	"	"	"	"	"	9/.9	44°F	06 24	06 29	A	60 55W
40149T	Cal step wedge		180 sec		"	Dew	1/2 Cont 5 min	@ 68°F DT			

Dome Temp. 6
Focus 40
Dome Temp.

Dome Temp. 50°F H=60%

Focus 40-R

Dome Temp. 42° H=82%

Transparency Conditions very windy ~~fast~~ cloud
strange Aurora like glow 5:10 EM
like milky way between Capella & Cass

2 sec guiding

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
:18	F	00 50E	+22 28	3-8	6.11	B8	8-8-8	Ap-Md	400/140	some cloud	Fine
7 28	F	00 47E	+16 00'	2-5	7 16	B9	7-7-7	Ap Md	400/180	.20	Fine s/gnd
2 48	A	00 08E	+42 27	2-6"	6.61	A0	8-8-8	"	400/140		v s/wk
	M	00 04W	+58° 22'	"	6.92	A2	8-8-8	"	400/162		Fine
	C	00 48 W	+16° 32'	2-4	1.93	AE IV	no filter 12	Calbr Stds	40/200	All Far right of Box	Fine sl Fog
	A	02 55 W	" "		"	"	12	"	40/50		Fine gng sl Fog
										.52 -0	sl Fog

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IIa-0-e 03094 ~ 10115

Date Tues - Wed Nov 11-12/25 **Observer** Hd-Tz **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40150	HD171550	18 30.4	+29 40	G12	IIaO-e	13/1.3	50°	17 40	18:24	A	02 55W
40151	HD 194071	20 18.5	+27 55	"	"	"		18:27	21 19	B	4 01W
40152	HD 221364	23 32.1	+28 07	"	"	"		21:23	22 29	C	2 17W
40153	HD 10516	1 37.4	50 11	"	IIIaJe	9/.9		22:33	23 09	A	0 31W
40154	HD 10260	1 35.3	60 32	"	IIIaJe	13/.5		23 14	00 04	B	1 28W
40154T	Cal step	wedge	180sec		IIIaJ-e			Dev 5 at 0.9			

Dome Temp. 5
Focus 4
Dome Temp. 4

Dome Temp. 52°F H-59°
Focus 40-R
Dome Temp. 44°F- H= 58°

Transparency Conditions Very good - 5/ = cloud

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
4 24	F	02 55W	+29 49	1"	8.00	K0 III	7/7/7	Hd 55V Lust II	800/125	.24 Pg	fine
4 19	E	4 01W	+28 17	1"-2"	9.06	G8 III	7/7/7	"	800/240	Fld drawn cloud	fine
4 39	C	2 04W	+28 38	2"-4"	7.02	K0 III	7/7/7	"	400/127		fair
3 09	A	0 31m W	50 39	1-2'	3.95	B9p	6-3.4 Hilfiker	Hd 513	40/123	Poor clouding in *	fine
3 54	B	1 28 W	61 00	2-4'	5.58	B7 II	7/7/7	" "	400/122	cloud .40 Pg *	fine
		120x 1/2 in 1 sec exp								* Alt Fo. right 120x	

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IIIaJ-E July 1975 - 24105
IIaF-E
IIaO-E 03094 - 10115

Date Fri Sat Thu 14-15 1975 Observer R. - Warfield
R. - Mavis
Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40155	α Per HD 10516	01h 37.4	+50°11	G-12	IIaJ-E	9/9	34°F	22:40	23:26	A	01h 20m W
40156	"	"	"	G-16	IIaF-E	9/9		23:31	00:11	B	01h 40m W
40157	63 And HD 14392	02h 14.4	+49°42'	G-12	IIaO-E	9/9		00:22	01:30	C	02h 33m W
40157T1	cal step wedge for plate 40156				IIaF-E	5 min					
40157T2	cal step wedge for plate 40155				IIIaJ-E	180 sec					
40137T3	cal step wedge for plate 40157				IIaO-E	90 sec					
40158	HD 28363	04h 23.3	+15°57	G-12	IIaO-E	9/3		01 33	02:45	A	04h 35m W
40159	HD 34364 AR Aur	05h 11.8	+33°39	G-12	IIaO-E	13/5		02:50	03:37	B	04h 44m W
40160	HD 86590	09h 54m 24s	+25°02	G-12	IIaO-E	13/3	32°F	03:35	06:08	C	07h 16m W

Dome Temp. 3
Focus 80
Dome Temp. 3

Dome Temp. 34°F 86%

Focus 80 R

Dome Temp. 32°F 96%

Transparency Conditions good with the odd cloud

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Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2:26	A	01h00w	+50°37'	2-3	3.95	BOp	2525-2	Sp Be-Bh	40/140	clouds right side of Box #4	Fine
2:41	B	01h46w	"	2-3	"	"	5-5-5	"	40/140	middle B Box #4	Fine
3:10	C	02h27w	+50°06'	4	5.44	ApSr	7-7-7	"	200/160		fine
										middle of Box #4	✓
										right out of Box #4	✓
											✓
3:45	D	01h35w	+16°12'		7.141	F8	7-7-7	"	400/120		Fine
4:27	E	01h29w	+33°50'		5.82 6.49	Ap	7-7-7	"	400/160	some thin clouds	Fine
5:13	G	00h34E	+24°45'		7.91	dG5	7-7-7		800/195	clouds/sat	OVERDEVELOP a little

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Date Sat-Sun Nov 15-16 1975 **Observer** R. + Watches **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40161	MHα 328-116	19h55.0	+39°41	G-16	IIaF-E	20/.3	38°F	18:00	19:30	A	03h55m
40161T1	cal step wedge for plate 40161				IIaF-E	5 min					
40162	HD 222899	23h35.1	+37°06	G-12	IIaO-E	13/.5		20:03	20:50	B	20h38m
40163	HD 225276	23h59.8	+26°06'	G-12	IIaO-E	13/.5		20:53	21:58	C	00h44m
40164	HD 227864	1h13.2	+39°25'	G-12	IIaO-E	13/.4		22:06	00:01	A	02h04m
40164T1	cal step wedge for plate										
~~40165~~	~~HD 232917~~	3h22.4	+39°51'	G-12	IIaO-E	13/.4		00:05	00:20	B	2h17m

Dome Temp.
Focus
Dome Temp.

Dome Temp. 48°F 73%

Focus 70R

Dome Temp. 44°F 92%

Transparency Conditions .....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		0h55W	+39°50'		~10.8	Em	no filter 5-10	F*	800/23	field drawn over develop clouds middle of Box 54 2x	
		Dew D19 N2 burst 4 min Evi						...22 min	2.20	to right side of Draco	
	B	00h31W	+37°35	2	6.9	F IV	7 7-7	Wide Visual Bi	400/180	through clouds at first "image shift"	fair
	C	01h14W	+26°36'		7.6	K5 III	7-7-7	" "	400/220		fair
	D	02h04W	+39°55		8.5	K0 III	7-7-7	" "	800/340	HD 7864 (?)	fair
					8.4	K2 III	7-	" "			
	B	0h ?W	+40°11						8 00	closed out	

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IIaO-E 03094–10115–
IIIaJ-E July 75–2405

Date Sun Mon Nov 16-17 1975 **Observer** Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40165	HD 217675	22h57m19s	+41°47'	G-12	IIIaJ-E	9/.9	45°F	19:56	20:27	A	
40166	"	"	"	G-16	IIaF-E	9/.9		20:35	21:30	B	
40166 S1	Spot Calibration				IIa-O	4			15m		
S2	" "				IIa-O	4			15m		
S3	" "				IIa-O	4			15m		
T1	Calibration Step wedge				IIa-O				45s		
T2	"	"	"		IIa-O				90s		
T3	"	"	"		IIa-O				180s		
40167	0 Da HD 10516	01h37.4	+50°11'	G-16	IIaF-E	9/.9		21:35	22:18	C	
40168	"	"	"	G-12	IIIaJ-E	9/.9		22:25	22:55	A	
40169	63 Tau HD 14392	02h14.4	+49°42'	G-12	IIaO-E	9/.9		23:06	23:56	B	
40169T1	cal step wedge for plates 40166-67				IIaF-E	5mm					
40170	HD 23862 HIS#	03h43.3	+23°51'	G-12	IIaO-E	9/.5		00:01	00:47	C	
40171	HD 19356	03h01.7	+40°34'	G-12	IIIaJ-F	9/.9		00:53	01:18	A	
40172	"	"	"	"	"	"	44°F	01:19	01:54	B	
40172T1 40172T2	Cal step wedge for plate		40165, 68, 71-72 40169 + 40170		IIIaJ-E IIaO-E	180sec 90sec					

Dome Temp. 50°F 90%

Focus 6.0R

Dome Temp. 48°F 99%

Transparency Conditions hazy

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Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		00h51W	+42°17	2	3.63	B6p	25-25-25 no filter	Shell * Bk	40/121	right end of Box #1	Sl. weak sl. guiding fog at end Sl. weak sl. guiding
		01h54W	"	"	"	"	5-5-5	"	40/142	middle of Box # 1	
		abt 40166	test plates		3900Å				12.5V	4"x5" plates	
		developed 8	min N2 burst D19		4300Å				12.5V		
		8psi 10sec	1sec burst		4810Å				12.5V		
										msc 2.73	
	C	00h00	+50°38		3.95	B0p	no filter 5 5 5	Sp Bk-Bk	40/140	middle of Box #1	N Sl. weak sl. guiding sl. weak sl. guiding
	A	00h36W	"		"	"	25-25-25	"	40/170	right end of Box #1	
	B	01h00W	+50°07		5.44	ApSi	7-7-7	"	200/160		Fine
		Dev 4min	N2 burst D19							middle of Box #1	✓
	C	00h25W	+24°07		5.1	SXp	7-7-7	C1 Shell	200/105		Fine
	A	01h35W	+40°56		2.2 3.3	B8V	25-25-25		40/140	right end of Box #1	Fine
	B	02h14W	"		"	"	25-25-25		40/140	closed up two days a/ td.	Sl. weak ✓
		Dev N2 burst	D19 4min	10+1	8psi		Pol .28			land in clippers wet	
		Brn N2 burst	D19 8min	10+1	5psi						

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Date 22 Nov 75 Observer lr Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40172 S1	Spot	Calibration			IIaO	4		10 min			
40172 S2	"	"			"	2		"			
40172 S3						1		"			
40172 T3	Calibration	Strip	Wedge		IIaO			45 s			
40172 T4								90 s			
40172 T5								300 s ~~180 s~~			
40172 T6		"			"			90 s			
40172 S4	Spot Calibration				IIa	4		5 min			
S5	"				"	2 4		5 "			
S6	"				"	1 4		5 "			

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions .....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
					3900 Å			15 volts		Box 4	
					4300 Å			"			
					4810 Å			"			
					GREEN						
					4300 Å			15 volts			
					"			"			
					"			"			

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IIIa-J-e (July batch) 24105

IIa-O-e 03094 16115

Waterloo

Date Sat-Sun Nov 22-23 1975 **Observer** Tn-Cmartin **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40173	HD 37468	05 33.7	−2 39	G12	IIIa-J-e	131.5	35°F	00:26	00:45	A	01 04E
40173T	Cal for 40173.			180sec	"						
40174	HD 37479	"	"	G12	IIa-O-e	131.5		00:46	01:40	B	00 11E
40175	HD 38670	05 42.1	+20° 00′	G12	IIa-e	"		01:50	02:24	C	0 26W
40175T	Cal step wedge 40174		76.	90sec	"						
40176	HD 74874 AB	08 41.5	+6 47	G12	IIIa-O-e	131.5		02:30	02:39	A	2 17E

Dome Temp.
Focus 75
Dome Temp.

Dome Temp. ≈ 33°F H= 90%

Focus 75-R

Dome Temp. .....

Transparency Conditions Clearing by 04

* At far right of F Lo. #1

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
10:45	A	01 04 E		3-6	3.57	09.5 V	25-25-25	Sp Pic - Blu	40/10	σ Ori AB *	Fine
		Dew D19 N2 burst		7psi	15	Ld .5	burst	4 Blu	68°F	*	
11:20	B	00 10 E	-2 30	2-5	6.32	B3p	7-7-7	Bp-Blu	400/140	σ Ori E	Fine 3rd
11:44	C	0h 26 W	+20 58	"	502	B9	77-7	Close Vis Bin	200/15	2pc saved	Fine but strang
		Dew D8	9min hr.								
12:39	A	2 17 E	+ 6 36	3-4	3.98	F8	7-77	"	200/100	some cloud	Fine sl strng

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more IIIa-J pit in vac

IIIa-J-e - (with test tag) OK.

Date Sun-Mon Nov 23-24/75 **Observer** Sho-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40177	HD 19356	03 01.7	+40 34	G12	IIIa-J-e	9/9	35°F	20:20	20:37	A	02 45
40178	"	"	"	"	"	9/9	"	20:40	21:07	B	02 15
40178T	Cal step	wedge	180sec	40177-80.	"						
40179	HD 19356	03 01.7	+40 34	G12	"	9/9		21:08	22:10	C	1 14
40180	"	"	"	"	"	"		22:17	22:57	B	00 45

Done Temp.
Focus 7[illegible]
Done Temp.

Dome Temp. H:95½

Focus 75-R

Dome Temp. .....

Transparency Conditions ..... Clouds mainly .....

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Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
37	A	02 47E		3-4	2.2-3.2	B8V	no filter 6-6-6	Radio Star	40/135	Algol	sl Strong
07	B	02 17E		"	"	"	6-6-6	"	40/130	Algol	Fine Strong sl Fog
		Dw D	Dist								
22 10	C	01:14E	+40 55		"	"	6-6-6	Rad. Star	40/49	Algol - Mod clouds	Very bad Fog
57	D	00:24E		2-5	"	"	6-6-6	"	40/99	Cloud	sl Strong sl Fog

(71)

IIa-0-e 03094-1611 5

Date Mon-Tues Nov 24-25/75 Observer MR-Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40181	HD 216400	22 47.5	+03 01	G12	IIa-0-e	91.5	36°F	17:40	20:45	A	01.59 W
40181T	Cal step wedge 81-82.	90sec			"						
40182	HD 358 = α And.	$0^h 03.2$	+28°32'	G12	"	91.5		20:50	21:48	B	01.37 W

Dome Temp. 35°F H=86%

Focus 75-R

Dome Temp. .....

Transparency Conditions ..... high thin cloud .....

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Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
45	f	01 50 W	+03 31	2-4"	686	H1	8-8-8	Am-MR	400/137	Fld checks thru cloud	V sl wk 949
		N_2 burst	Dw DIS	103°F			8 min.				
1:07	f	01 37 W	+29 01	2-3"	1.92	B9p	8-8-8	MKstR-MR	200/38	cloud	sl wk

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IIIa-J-e Jul Gotch—24105 sl Fog
IIa-F-e
IIIa-O-e 03099 - 16115

Date Fri-Sat Nov 28-29/75 **Observer** Tm-SM **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40183	HD 217675	22 57.3	+41 47	G12	IIIa-J-e	9'.9	37°F	18:07	18:48	A	00 06E
40184	"	"	"	G16	IIa-F-e	"		18:58	19:47	B	00 52W
40184 T1	Cal For 40183.			180sec	IIIa-J-e or ~~IIa-F-e~~ ??			Discard IIa-F-e			
~~40184 T2~~	~~Cal for 40183.~~			~~180sec~~	~~IIIa-J-e or IIa-F-e~~						
40184 T3	Cal for 40184.			5 min	IIa-F-e						
40185	HD 14392	02 14.4	+49 42	G12	IIIa-O-e	9'.9		23 08	00:11	A	02 03 W
40185 T	Cal for 40185-87.			90sec	IIa-O-e						
40186	HD 34364	05 11.8	+33 39	G12	"	13'.5		00:20	01:18	B	00 14W
40187	HD 28363	04 23.3	+15 57	"	"	9'.3		01:23	02:27	C	02 52W

Dome Temp. 38°F H=80%
Focus 75-R
Dome Temp. .....

Transparency Conditions very hazy
✓ at Far Left Box #2 ** middle of Box
* At Far Right " Box #2

AR4

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2:48	A	00 01E	+92 17	2-3	3.63	B6p	not filter 5-5-5	Shell-B6	40/140	*	sl Fog Fine
9:47	B	00 58W	"	1"-3"	"	"	not filter 5-5-5	"	40/150	** some cloud	Fine
		Dew had agt 7 min @ 68°F DP								*	
										*	
		Dew had agt 9 min @ 68°F DP								**	
6:11	A	02 03 W	+50 07	2"-4"	5.44	Ap Sl	8-8-8	Ap-B/n	200/160	✓	Fine
		Dew had agt 9 min @ 68°F DP			5.5					✓	
0:18	B	00 14W	+2 35 1	3-4	F32 -0.4	Ap	7-7-7	Ea/Bn-B/n	200/70	✓ broken 2pc saved 2:1	Fine
1:27	C	02 12W	+16 12	2-3	7.14	F8	8-8-6	Sp Bn-B/n	700/50	✓ cloud	sl wk

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IIa-O-e 03094 — 16115

Date Mon. Tues Dec 1-2 /75 Observer MR-Tq Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40188	HD 216400	22 47.5	+03 01	G12	IIa-O-e	9/.5	33°F	17:35	20:16	A	0.47 W
40188T	Cal for 40188-90		90sec		"						
40189	HD 7374	01 08.8	+15 36	"	"	9/.5		20:21	21:10	B	0.38 W
40190	HD 10260	01 35.3	+60 32	"	"	13/.5	28°F	21:23	22:05	C	0.47 W

Dome Temp. 30°F H=81%

Focus 80-R

Dome Temp. 20°F H=75%

Transparency Conditions Good but Gusty

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
20 6	A	0:47 W	+03 30	3-5"	6.86	A1	8-8-8	Am-MR	400/180	Trouble with Low Slew - End of Temp	Fine
		Dew hand gun 9 min @ 68°F D.P.									
01 0	B	0:20 W	+16 07	3-4	5.80	B8p	8-8-8	Ap-MR	400/140		Fine
29.05	C	0:47 W	+60 59	"	5.58	BTV	7-7-7	SpBm-Hd	400/92	Snow	9mg visual

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IIaO-e 03094 - 16115

Date Tues-Wed Dec 2-3 / 75 Observer Hd-Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40191	HD204642	21 24.9	28 09	G12	IaOE	B-3	30F	17 30	18:57	A	0.55 W
40191T	Cal for 40191			90sec	"						0.99 W

Dome Temp. 30°F H=95%

Focus 80-R

Dome Temp. .....

Transparency Conditions Sl hazy & cloud

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		01 55 W	+28 34	1-3"	8.4	K2 III	7-7-7	SSV List II	800/260	sl cloud	fine
		Du Dip	Nebust	15 int	.7	dust	8 min @ 68°T		8 psi		

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IIaJ-E ?-24115
IIaF-E

Date Wed-Thurs Dec 3-4 1975 Observer R. Sh Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40192	HD 217675	22h 57m.55	+41° 47'	G-12	IIIaJ-E	9/.9	30°F	18.00	18:35	A	
40193	~~PPER~~ "	"	"	G-16	IIaF-E	9/.9		19.05	20:07	B	
40194	HD10516	01h 37.4	+50° 11'	G-16	IIaF-E	9/.9		20:13	21:20	C	
40195	HD19356	03h 01.7	+40° 34'	G-16	IIaF-E	9/.9		21:27	21:45	A	
40196	HD 19356	"	"	"	"	"		21:52	22:31	C	
40196 71	cal step wedge to plate 40193		-96		IIaF-E	5 min					
40196 72	" "	40192			IIIaJF	180 sec					

Dome Temp. 24°F 76%

Transparency Conditions hazy with some cirrus cloud around 180

Focus 80R

Dome Temp.

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
9 35	1	00405W	+42017	3-4	3.63	B6p	5-5 S (wide angle)	Shell*	40/140	Mid of Box	fine grinding
2 17	3	01437W	"	4-5	"	"	5 5 S (wide angle)	"	40/150	middle of Box	weak
2 10	12	00410W	+50°38		3.95	B6p	5-5 S	Sp Aur-Blu	40/150	" "	fine
2 05	1	0050E	+40°56'		2.2 3.1	B8V	5-5-5	Radio Star	40/123	" "	v.sl weak
1 51	0	00 14 E				B8V	5-5	Radio Star	40/83	ditto	weak
		Dew Dis	Dew Point	15 inch	7	Quartz	4½	min @ 65°F	8 sec	middle of Box	
		"	"	"		"		"	"	very left of Box	

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IIaF E 03075-03125
IIIaJ-E ? -24115
IIaO-E 03094-16115 IIaO-E 03094-01125

Date Jan 4-5 1975 Thu-Fri **Observer** RR-Ri / [illegible]-Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40197	HD 212097	22°16.7	+27°50	G-12	IIIaJ-Z	9/.5	27°F	17:34	18:31	A	
40198	"	"	"	G-16	IIaF-E	9/.5		18:35	19:27	B	
40198T1	cal step wedge for plate 40198				IIaF-E	5 min					
40198T2	" " " 40197				IIIaJ-E	180 sec					
40199	HD 14392	02h 14.4	+49°42	G-12	IIaO-E	9/.9		20:41	21:53	C	
40200	"	"	"	"	IaO-F	9/.9		21:55	22:45	A	
40201	"	"	"	"	"	9/.9		22:47	23:30	B	
40202	HD 3, 364	05" 11.8	+33°39'	G-12	IIaO-E	13/.5		23:35	00:02	C	
40203	HD 2[illegible]	04°7.0	+22°09	G-12	IIaO-E	9/.5		00:07	00:56	A	
40204	HD 28150	04°21.5	+[illegible]	G-12	IIaO-E	9/.5		01:01	02:38	B	
40204T1	cal step wedge for plates 40199 – 40203				IIaO-E	90 sec					
40204T2	cal step wedge for plates 40204 – 05				IIaO-E	90 sec					
40205	HD 51111	06 52.2	+42 26		IIaO-E	9/.5	26°F	02 45	04:10	C	

Dome Temp. 30
Focus 30R
Dome Temp. 30

Dome Temp. 30°F 92%
Focus 90R
Dome Temp. 30°F 100%

Transparency Conditions fair

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00h 45W	+28° 18'		4.83	B8I	N filter 5-5-5	Ap Bk Bk	40/80	RHS of Box #2	sl weak
01 43W	"		"	"	N filter 5-5-5	"	40/56	LHS of Box OVEREXPOSED	sl weak
Dew 4 min @ 65°F		D19	N2 burst		15 sec	int .7 dur.	Epsi	LHS of Box #2	
"	"		"		"	"	"	RHS of Box #2	
00h 09W	+50° 05	4	5.44	ApSi	7 7 7	Ap Bk	240/160		fine
01h 01W	"		"	"	7-7 7	"	240/160		fine
01 46W		3-4	"	"	7 7 7	"	240/160	exposed Box #3	fine
00h 39E	+33 49		5.82 6.49	Ap	7-7 7	Ecl Bi Bk	240/80		fine
01h 20W	+22° 28'		6.11	B8	8-8-8	Ap-MR	40/80		fine
02h 50W	+18° 18'	3-4	6.74	A0	8-8-8	Ap-MR	160/160	new box of plates	sl weak
Dew 5 min @ 68°F		D19	N2 burst		15 sec	int .7 dur	Epsi		
"	"	"	"		"	"	"		
01 48W	+42° 25'		6.61	A0	8-8-8	Ap MR	400/180	closed up because of ice inside of the shutters at the end of the time	sl weak fine

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IIaO-E 03094-01125

Date DCC 6/7 SAT/FRI Observer CM/RL Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40206	HD 216373	22h 39.6	+41° 18	G-12	IIaO-E	13/.5	38°F	17:48	18:31	A	
40207	HD 219452	23h 03.1	+45 51	G-12	IIaO-E	13/.5		18:55	19:27	B	
40208	HD 223531	0h 38.2	+46 25	G-12	IIaO-E	13/.5		19.30	21:31	C	
40209	HD 215524	2h 248	+24° 48	G-12	IIaO-E	13/.5		21:36	22:18	A	
40210	HD 222906	3h 36.1	+32° 38	G-12	IIaO-E	13/.5		22:22	23:59	B	
40211	HD 223922	3h 45.2	+36° 32	G-12	IIaO-E	13/.5		00:02	01.19	C	
40211T1	cal step wedge for plates 40206-17				IIaO-E	90 sec					
40212	HD 216670	22h 42.4	+20° 50	G-12	IIaO-E	13/.5		01:22	01 51	A	
40213	HD 40673	5h 56.6	+51 35	G-12	IIaO-E	13/.5		02 03	2:45	B	
40214	HD 71162	8h 10.7	+20° 52	G-12	IIaO-E	13/.5		3:06	04.12	C	
40215	HD 146714	AB 15.5	+6° 17	G-12	IIaO-E	13/.5		4:19	04.25	A	
40216	HD 81822	9h 02.5	32 06	G-12	IIaO-E	13/.5		04:29	5 23	B	
40217	HD 100177	11h 33.5	+45 40	G-12	IIaO-E	13/.5	22°F	5:26	06:34	C	

Dome Temp. 3
Focus
Dome Temp.

Dome Temp. 30°F 75%
Focus 90R
Dome Temp. 18°F 86%

Transparency Conditions excellent

plates in Box #3

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Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00h 31 W	+41° 45'	4-5	6.1	K0 III	7/7/7	Radial Velocities Wide Vis. Filter	400/220		Fine
01h 02 W	+46° 22'		6.7	K0 III	7/7/7	" " "	400/220		Fine
01 40 W	+46° 55'	3-4	7.1	K0 III	7/7/7	" " "	800/460	HD 3531 ??	Fine guiding
00h 31 W	+25° 14'		6.3	F8 V	7/7/7	" " "	400/200		Fine
01h 02 W	+32° 58'		7.2	F5 V	7/7/7	" " "	400/200		Fine guiding sl.
02 14 W	+34° 50		7.0	F5 V	7-7-7	" " "	400/200	HD 23922 ??	Fine
Dec Dig	Nebular Emission		6.7° = 8pi 15 int. 7 dur.						/
00h 48 W	+21° 00'		5.52	F9	7-7-7	Radial Vel Vis Filter	400/160		Fine
01h 27 W	+51° 38'		6.44	A5	7-7-7	" " "	400/160		Fine
01h 30 W	+24° 43'	4-5	7.0	A2	7-7-7	" " "	400/160		Fine sl. again
00h 24 W	+06° 37'		3.77	B9	7-7-7	" " "	400/200		Fine
00h 01 E	+31° 48'		6.6	F5	7-7-7	" " "	400/200		Fine
00h 20 E	+45° 19'		6.9	K0	7-7-7	" " "	400/200		Fine guiding

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IIIaJ-E ? 24115
IIaF-E 03075-03125

Date Sun Mon Tue 7-8 1975 Observer Sto-P Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40218	HD19356	03h01.7	+40°34	B-12	IIIaJ-E	9/9	25°P	17:50	18:05	A	
40219	"	"	"	"	"	"		18:07	18:46	B	
40220	"	"	"	"	"	"		18:48	19:10	C	
40221	"	"	"	"	"	"		19:23	19:45	D	
40222	"	"	"	"	IIaF-E	"		19:54	20:23	B	
40222T1	cal stepwedge for plate 40222				IIaF-E	5 sec					
40222T2	cal step wedge for plates 40218–40221				IIIaJ-E	180 sec					

Dome Temp.
Focus 90
Dome Temp.

Dome Temp. 25°F 82%

Focus 90R

Dome Temp. .....

Transparency Conditions cirrus clouds all around

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
04h16E	+40°56		2.2/3.3	88V	5 6 6 no filter	Pads Sta	40/123	LHS 6 Box # 2	Fine guiding
03h35E	"		"	"	6 6 6 no filter	"	40/121	LHS 6 Box # 2	Fine
03h11E	"		"	"	6 6 6 no filter	"	40/122	LHS 6 Box # 2	Fine guiding
02h34E	"		"	"	6 6 6 no filter	"	40/121	LHS 6 Box # 2	Fine guiding
01h56E	"				5 5 5 no filter		110/74	clouded out RHS Box # 2	weak
Dw 5 min DIA Nebulosity	"	"	"	67°F	9psi	15 seeding	.7 int.	"	"
								RHS 6 Box # 2	
								LHS 6 Box # 2	

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IIIa-J-e ? -24115
IIa-O-e 03094-01125

Date Fri-Sat Dec 12-13 /1975 **Observer** Tn., Nevin Hynni / **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40223	HD 217675	22 57.3	+41 47	G12	IIIa-J-e	91.9	29°F	17 22	18:18	C	00:23 W.
40223T	Cal for	40223-24			"	90sec	mixture				
40224	HD 23862	03 93.3	+23 51	G12	IIIa-J-e	13/.9		19:34	22:56	C	00:5 W.
40225	HD 28363	04 23.3	+15 57	"	IIa-O-e	9/.3		23:02	00:37	A	01:17 W.
40225T1	Cal for 40225			90sec	"						Dew
40225T2	Cal for 40223-24			180sec	IIIa-J-e						

Dome Temp. 2
Focus 90
Dome Temp. 2

Dome Temp. 27°F H=65%

Focus 90-R

Dome Temp. 20°F H=72%

Transparency Conditions Hazy

* At Left of Box #3

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00 23 W	+42 18	3"-6"	3.63	B6p	no filter 6-2-5	Shell-Bkg	40/140	cloud [illegible] E	Fine
00 15 W	+24 09	3"-10"	5.1	B8p	no filter 4-4-4	Gl-Shell	200/610	Last 15 hr very fast (2" seeing) some cloud (very bright meteor thru Pleades)	Fine
01 17 W	+16 12	2-4	7.14	FB	8-8-8	Sp Bkg-Bkg	400/105	* cloud	v sl wk
Dew No hunt 8 min	D19	10sec	int	.7 dm.	8 psi			*	
" " "	"	"							

Ending Time E.S.T	P.H.
7 17	C
7:56	C
0 17	A

189

IIa-O-e 33094 - 01125
IIIa-J-e ? - 24115
** IIa-O-e - 12125

Date 17/18 December 1975 Wed/Thurs **Observer** RLn - Tn - MeG **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40226	HD 14392	02 14.4	+49 42	G12	IIa-0e	9/19	27°F	20 58	22:28	A	0:34W
40226T	Coll stop edge		90sec		"						
40227	HD 37468	05 33.7	-2° 39	G12	IIIa-Je	13/.5		22 51	23 34	A	00:1
40228	HD 37479	05 33.7	-2° 39'	G12	IIa-OE	13/.5		23 38	01:01	C	00:1
40229	HD 34364	05 11.8	+33 39	"	"	13/.5		01:05	01:44	B	01:5
40227T	Col for 40227		180 sec		IIIa-Je						
40230	HD 51418	06 52.2	+42 26	G12	IIa-O-e	9/.5		01:48	03:30	C	02:1

Dome Temp. 20°F H= 88%

Focus 90-R

Dome Temp. .....

Transparency Conditions Semi clear -> Excellent 190

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		01 34 W	+50 02	4-10'	5.44	Ap Si	8-8-8	Ap - Rla	400/265	cloud sq end	Fine
										* diffuse - light of Bar	
		00 36 E		2-4	3.51	Sp. Si	4-4-5	Sp. Pin-Bu	0-/320	clearing equia	Fe str Strong
		00 50 W	-2° 34'	"	4.22	B2p	7-7-7	Bp - Rla	400/140		Fine
		01 55 W	+33 44	2-3'	5.8-6.5	Ap	7-7-7	Ap - Rla	400/140	broken 2pc sequal	Fine
										*	
		02 00 W	+42 23	2-3	6.61	A0	8-9-7	Ap - MR	400/140	cloud sq 3-4m 3" broken edge snow	v sl wk Fine

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IIIa-J-e ? -24115

Date 18-19 Dec 1975 Thurs-Fri Observer Bh-Tq Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40231	HD217675	22 57.3	+41 47	G12	IIIa-J-c	91.9	17°F	17 16	18:47	A
40231T	Cal for	40231		180sec	"					

Dome Temp. 1
Focus 110
Dome Temp.

Hour Angle End
0046W
Dec 59

Dome Temp. 12°F H= 68%

Focus 110-R

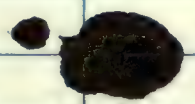
Dome Temp. .....

Transparency Conditions Excellent

192

then Lake effect cloud 18:20

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
8:17	A	0046 W	42 11	3-4	3.63	BGp	5-5-5	Bln-Shell	40/130	TV guided	Fine → s/Fog → strong
		Dew D.P.	by hand	7mi	@ 68°F						s/ Fog



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IIa-0c 03094 -01125

working on TV system

Date 20-21 Dec 75/Sat-Sun Observer Jn - Rc Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40232	HD37479	05 33.7	-2 39	G12	IIa-0c	13/1.5	12°F	22:27	01 31	A	01 33W
40232T	Cal step wedge for 40232			98:0c	"						
40233	HD86590	09 54.4	+25 02	G12	"	13/1.3	4°F	01 44	07 00	B	02 42W

Dome Temp. 11
Focus 11
Dome Temp.

Dome Temp. 10°F H=90%
Focus 110-R or 90 block
Dome Temp. 0°F H=90%

Transparency Conditions very good by 22h

TV guided (Fine)

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0131	A	01 33W		3-5"	6.32	B3p	7-8-6	Bp-B1n	400/135	slow? some haze	sl streaks
		Dec 8 mi N2 brnt	68°F	8psi	15sec	.7sec		Dec 26/75			
0700	P	0242W	+24 41	3"-8"	7.9	dG5	7-7-5	Rdi-Blu	800/220	slow? no TV guide	sl. weak
										These plates taken without night	

19[illegible] TV system really works WOW!

IIIa-J-e ? - 24115
IIa-F-e 03075 - 03125
IIa-O-e 03095 - 12125

Date 21-22 Dec 75 / Sun-Mon Observer Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40234	HD 217675	22 57.3	+41 47	G16	IIa-F-e	9/1.5	11°F	17 26	18:02	A	00 43 W
40235	"	"	"	"	"	9/1.9		18 03	19:06	B	01 47 W
40235T	Cal for 40234,35			5 min	"						45 mm E
40236	HD 217675	22 57.3	+41 47	G12	IIIa-Je	9/1.9	10°F	19:11	20:03	C	02 44 W
40236T	Cal for 40236-37, 40, 45			180 sec	"						+3 mm E
40237	HD 23852	03 43.3	+23 51	G12	"	13/1.5		20 09	23 11	A	01 W
40238	"	"	"	"	IIa-Oe	9/1.5		23 12	23 32	B	0 W
40239	HD 37479	05 33.7	-2 39	"	"	13/1.5		23 40	00:44	C	0 50 W
40239T	Cal for	40238-39, 41-44		90 sec	"						On 8 mm
40240	HD 37468	05 33.7	-2 39	G12	IIIa-Je	13/1.5		00 45	01:07	A	1 13 W
40241	HD 34364	05 16.7	+33 44	"	IIa-O-e	"		01:11	01:40	B	2 06 W
40242	HD 51418	06 52.2	+42 26	"	"	9/1.5		01:48	03:03	C	1 48 W
40243	HD 100054	11 25.7	+60 15	"	"	13/1.5		03:12	05:03	A	0 44 E
40244	HD 101906	11 38.6	+24 33	"	"	13/1.3		05:12	06:59	B	1 58 W
40245	HD 116656	13 19.9	+55 27	"	IIIa-Je	9/1.9		07:06	07:17	C	0 22 E

Dome Temp.
Focus
Dome Temp.

Dome Temp. +12°F H-65%

Focus 90-B

Dome Temp. +10°F H=100%

Transparency Conditions Excellent

Slight haze

* At middle of Box #3

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
8 02	A	00 43 W	+42 43	2-3	3.63	B6p	no f. filter 3-5-5	Shell-Bl$_2$	40/80	TV used *	Fine
19 06	B	01 47 W		"	"	"	5-5-5	"	40/160	" *	Fine
		4½ min @ 67½°F N_2 burst		10 sec	.7 sec		Dec 26/75			*	
00 03	C	02 44 W		2"	3.63	B6p	no f. filter 5-5-5	Shell-Bl$_2$	40/140	OV 12-1 * Sc 24 **	Fine
		4½ min @ 67½°F N_2 burst		10 sec	.7 sec		Dec 26/75			**	
07 11	A	01 09 W		2-3"	5.1	B8p	no f. filter 4-4-4	Shell-G1	200/610	** For right Box #3 **	Fine
03 32	B	01 25 W		"	"	"	8-8-8	"	200/105		Fine
05 44	C	0 50 W		3-4	6.32	B3p	7-7-7	Bp-Bl$_2$	400/140		Fine
		Dec 8 min @ 68°F N_2 burst		10 sec	.7 sec		Dec 26/75				
11 07	A	1 13 W		2-3	3.5/1	09.5V	no f. filter 4-4-4	Sp-Bl$_2$-Bl$_3$	40/≈70	**	Fine N. sh. guiding
01 40	B	2 06 W	+33 14	1'-2'	5.8-6.5	Ap	7-7-7	Ec/Bl$_2$-Bl$_3$	400/140	** Dec	Fine
03 03	C	1 48 W	+42 22	1"	5.61	A0	8-8-8	Ap - MR	400/180	(Good TV guiding at 2 Frames)	Fine
05 03	A	0 44 E	+59 48	1'-2'	8.0	A1	8-8-8	Am - MR	400/200	close visual W WRONG STAR fainter one in HD 10005 4f	Fine V.S.D. guiding
00 59	B	0 58 W	+29 09	2"	8.24	G2V	7-7-7	S SV-Hd	800/250	Flo ebooks	Fine
07 17	C	0 22 E		1"	2.72	A2V	4-8	A225	46/110	**	Fine

LGT * Note

IIa-0-e 03095-12125

Date Twisted Box 23-24/6 Observer Sm/Or-Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
~~40245~~	~~HD 204 Sec~~	~~21 22.2~~	~~35 3~~	~~G12~~	~~IIa-0~~	13/.3		17 35		A	
Archie →	RA Clamp not working - probably ice crystals on contact										ts!
Extra	IIIa-J from Box #2 Labelled "old IIIa-J" put in Exposed Box										to
40246	HD37956	05 37.1	+29 10	G12	IIa-0e	13/.3		23 27	2 42	A	2.51 W
40247	HD67402	08 02.7	27 47	"	"	"		2 47	6 04	B	3.50 W
40247T	Cal for 40246-48			90sec	"			—	—		2m 66
40248	HD112014	12 48.3	+83 58	G12	"	13/.5		6 12	7 09	C	0 10W

Dome Temp.
Focus 90
Dome Temp.

Dome Temp. 10°F H=80%

Focus 90-B

Dome Temp. 5°F H=80%

Something like a Fire ball reported 17:15 in NNE bright white

Transparency Conditions Clear 99% by 23h very good

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
					3.44	K2III	7-			Clouds + snow	
		ts!	Tq								
		to	test for		fog.		Labelled		Test	old (discard)	Fog
2 42	A	2/51 W	+29 12	3-5"	K1III	7.96	7-7-7	SSV-HL	8:0/260	Fld Drang	Fine
6 04	E	3/50W	+27 34	"	K0III	8.17	7-7-7	"	8:0/246		Fine
		8min @ 68°F N2 burst		10m	.7 mm		Dec 26/75				
7 09	C	0 10W	+83 33	4-5"	A0	5.84	7-7-7	SSV-HL	200/60	N of pair	Fine
										TV system not as good as other night	
										→ Eliminated Star Counts for dark Exp.	

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IIaF E - 03075-03125
IIaO-E - 03094-12125
IIIaJ-E - 03075- 22125

Date Sat Sun Dec 27-28 1925 Observer Ri Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle East
40249	HD 217675	22h 57m 19s	+41° 47'	C-12	IIIaJ-E	9/.9	25°F	17:40	18:50	A	02h 7m
40250	"	"	"	C-16	IIaF-E	9/.9		19:02	20:28	B	03h 3m
40251	HD 23862	03h 43.3	+ 23° 51'	C-16	IIaF-E	13/.5		20:37	23:58	C	06h 13m
40252	"	"	"	C-12	IIaO-E	9/.5	20°F	00:07	01:10	A	03h 25m
4025271	cal step wedge	40250,51			IIaF-E	5 min					1/2 Max
4025272	cal step wedge	40249			IIIaJ-E	180 sec					
4025273	cal step wedge	40252			IIaO-E	90 sec					8 min

Dome Temp. 25°F 95%

Focus 140 R

Dome Temp. 22°F 100%

Transparency Conditions Hazy

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02h00mW	+42°13'	3	363	B6p	5-5-5 (N filter)	Shell*	40/140	right side of exposed Box #1	Fine
03h34mW	"		"	"	5-5-5	Shell Blu	40/160	middle of Box #1	Fine
02h17mW	+24°05	3-4	5.1	B8p	5-5-5 (N filter)	Bl-Shell	200/452	middle of Box 1	Fine
03h30mW	"		"	"	8-8-8	"	200/105	clouds	Fine
4½ min @ 67½°F		N2 brush* 10 oz. 7 oz				Dec 29/75		middle	
								right	
8 min @ 67½°F		N2 brush 10 oz. 7 oz				Dec 29/75			

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IIIa-J-e 03075-22125
IIa-O-e 28115-22125

Date Sep-Nov Jan 4-5 1976 **Observer** Tnr-Tm **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40253	HD 217675	22 57.3	+41 47	G12	IIIa-Je	9/.9	22°F	17 27	18:53	A	02 30 W
40253T	Cal step	wedge	for 40253		"	180sec					Dw ½
40254	HD 30869	4 46.2	+13 29	G12	IIa-Oe	9/.3		19:03	22:00	B	00 13 E
40254T	Cal for 40254-55				"	90sec					Dw ½
40255	HD 28226	4 22.1	+21 24	G12	IIa-Oe	9/.3		22:12	22:53	B	01 04 W

Dome Temp. +16°F H=68

Focus 100-R

Dome Temp. +10°F H=92%

Transparency Conditions Very good photometric

Ending Time E.S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
8'53	A	02 30 W	+42 13	3"7"	3.63	B6p	no ∩ Hor 5-5-5	Shell-Rig	40/120	X1	strong
		Dew 4½ min N₂ burst D19 10 sec ind .7 sec dur @ 68°F								* At Far right Box #1	
2 00	F	00 13 E	+13 38	3-5°	6.77	F5	8-8-8	Hyad bin	400/136	thin cloud - thick - sand	Fine
		Dew 9 min D19 N₂ burst		10 sec ind .7 dim				068°F			
22 53	E	01 04 W	+21 36	3"6"	5.99	Am	8-8-8	Hyad bin.	400/47	snow	v sl wk

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IIIa-J-e 03075 - 22125
IIa-O-e 28115 - 22125

Date Mon-Tues Jan 5-6 1976 **Observer** MR-Tm/But-Tm **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40256	HD 217675	22 57.3	+41 47	G12	IIIa-Je	9/.5	16°F	17:35	18 05	A	01 44 W
40256T	Col step	for 40256,	63	180sec	"						
40257	HD 26571	04 07.0	+22 09	G12	IIa-O-e	9/.5		18 11	19 36	B	01 55 E
40258	"	"	"	"	"	"		19 40	21 02	C	00 29 E
40258T	Col for 40257 -62			90se	"			~~21 08~~		~~A~~	
40259	HD 22860	03 35.2	+28 23	G12	"	13/.5		21 08	23 07	A	02 09 W
40260	HD 26571	04 07.0	+22 09	"	"	9/.5		23:12	00 42	B	01 13 W
40261	HD 38817	05 43.4	+43 59	"	"	13/.5		00:48	03 31	C	04 24 W
40262	HD 51418	06 52.2	+42 26	"	"	9/.5		03.35	05 52	A	05 38 W
40263	HD 116656	13 19.9	+55 27	"	IIIa-J-e	9/.9		06 05	06:30	C	

Dome Temp. 16°F H=72

Focus 90-B

Dome Temp. .....

Transparency Conditions Very Good → hazy

Ending Time E.S.T	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
8 05	A	01 44 W	+42 14	1"-2"	3.63	B6p	5-5-5 filter	Shell-Bkg	40/70	* At right of Box	strong
		Dew N2 burst DIS 4 hr min @ 68°F								*	
9 36	B	01 55 E	"	1"-3"	6.11	B8	8-8-8 filter in	Ap - MR	400/140	only seen with TV alone	Fine
1 02	C	00 29 E	"	"	"	"	8-8-8	"	400/140		Fine
	A	Dew N2 burst DIS 8 min @ 68°F					~~7~~		~~400~~		
3 07	B	02 09 W			6.11	B-9	7-7-7	"	400/153		Fine
0 43	C	02 13 W		1"-2"	6.11	B8	8-8-8	"	400/190		Fine
3 31	C	04 24 W	+44 02	2"	7.51	A1	7-7-7	Am - MR	400/147	slow - in TV	
5 52	A	05 38 W		"	6.61	A0	7-7-7	Ap MR	400/90	int of TV slight wobble	
	C	00 10 E	+55 03	"	2.27	A2V	5-5-5 filter	A 225 *	40/132	Cloudy 9 PM	vdg s/wk
		Telescope started oscillating at							9 40W	* for 20 min	21 vdg Strong

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IIIa-J-e 03075-22125
IIa-F-e 03075-03125
IIa-O-e 28115-22125

Date 8/9 JAN 1976 Thurs/Fri Observer B. Ia-T. a/ Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40264	HD 217675	22h 57m	+41° 47'	G-H	IIIa-F	9/7	14°	17:40	18:28	A	02 20 W
40265	"	"	"	G16	IIa-Fe	91.7		18:31	19:44	B	03 35 W
40266	"	"	"	G17	IIa-Je	91.9		19:49	21:00.	C	04 52 W
40267	HD 34364	05 11.8	+33 39	"	IIa-Oe	131.5		21:10	21:53	A	00 31 E
40267 T1	Cal for 40267, 68, 71			90sec	"						Dew Lens
40267 T2	Cal for 40264, 66, 69, 70			180sec	IIIa J-e						" "
40267 T3	Cal for 40265			5min	IIa-Fe						" "
40268	HD 37479	05 33.7	-2 39	G12	IIa-Oe	131.5		21:58	23:22	B	00 38 W
40269	HD 37468 } posible	"	"	"	IIIa-J-e	131.5		23 23	23:43	C	03 59 W
40270	" } mixup	"	"	"	"	"		23 52	00 07	C	01 23 W
40271	HD 34364	05 11.8	+33 39	"	IIa-Oe	"		00 19	00 37	A	02 14 W
40271 F	Focus Test			G12	IIa-O	13	+9°F			B	

Dome Temp. 14
Focus 90
Dome Temp.

Dome Temp. 14° F H = 71%

Transparency Conditions Very good

Focus 90-B - 110-R

Dome Temp. .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02 20 W	+42 12	"	3.63	B&p	no filter 4-4-5	Shell-Bkm	40/100	*	Fine
03 35 W	"	"	"	"	6-6-6	"	40/130	**	Fine
04 52 W	"	2"	"	"	5-5-5	"	40/100	*	sl stormy
00 31 E		2" 4"	5.8-6.5	Ap	7-6-7	Ecl/Bkm-Bkm	400/140	AR Hor	vsl str
Dew Rebuilt D19		0 min	067°F		.7 int	10 dur			
" "	" "	4½ min		"	"	"		* At Far right	
" "	" "	"		"	"	"		** In middle of box	
00 38 W		3"	6.32	B3p	7-7-6	Bp Bkm	400/140	cloud - (TV not work)	Fine
00 59 W		2-4"	3.51	09.5 V	no filter 4-3-4	Sp-Bkm	40/48	* TV working fine	Fine
01 23 W		"	"	"	4-7	"	40/43	* " cloud again	Fine
02 14 W		3"	5.8-6.5	Ap	7-12	Ecl/Bkm-Bkm	400/45	Show again	sl wk
									vsl blue

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IIIa-J-e 03075-22125

Date Fri-Sat Jan 9/10 1976 **Observer** Tu-Mor/Tu-Wtn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40272	HD217675	22 57.3	+41 47	G12	IIIaJe	9/9	+14F	17 49	18:42	B	02 3/4W
40273	"	"	"	"	"	"		19 01	19:50	C	03 4/4W
40274	HD 37468	05 33.7	-2 39	"	"	13/5		19:57	20:22	AB	2:15E
40274T	Cal for 40272-74			180sec	"						
40275	HD 37479	05 33.7	-2 39	G12	IIa-O-e	13/5		20 25	21:25	B+	01 10E
40275T	Cal for 40275			90sec	"						
40275F	Focus Test			G12	IIaO	13	13F			B	
40276	HD86590	09 54.4	25 02		IIa-O	13/3		00 56	04:22	A	01 18W
			To get more accurate Mid Exp Use →					01 40	04:22		
			Due to cloud new begin								

Dome Temp. 15°F H=80%

Focus 90-B

Dome Temp. 10°F H 98%

Transparency Conditions Very Good

2 57 59

284

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02 38 W		2"	3.63	B6p	no filter 7-7-5	Shell - Bl	40/103	*	Sat quality Fine
03 46 W		2	"	"	7-6-6	"	40/103	*	sl. grainy Fine
2:15 E		2'	3.51	09.5V	5-5-5	Sp Bin - Bl	40/50	* mixed holder	v sl. weak
Dew 4½ min	D19 D2 burst	.7 dm	10 int		@ 68°F			* At right of loc #3	ø
01 10 E		2-3"	6.32	B3p	7-6-7	Bp - Bl	40/82	** mixed holder/cloud	sl weak
Dew 10 min	D19 D2 burst	.7 dm	10 int		@ 68°F				
	in/out of				3/3 no filter			**	Fine
01 18 W	+22 41	1-2'	7.91	165	7-7-6	Bin - Bl	80/203	** cloud - Good TV guider	compressed, fogged
								** Push IIa-O-e plates	
								Snow - cloud	

209

IIaO, E 28115-22125
IIaO E* 28115-07016

Date Wed 9th Jan 14-15 1776 **Observer** B.A.R. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40277	HL 1619	03 19.4	+30 49'	G 12	IIaO-E	131.5	29°F	18:01	20:33	A	2h 32m
40278	HD 26571	04h 70	-22°09'	G-12	IIaO-E	9/.5		20.43	21:43	B	0h 60m
40278T1	cal step wedge for plate 40277, 7980				IIaO-E	90 sec		1			0h 0m
40278T2	cal step wedge for plate 40278				IIaO-E	90 sec					0h 0m
40279	HL 2657	04 07.0	+22 09	G 12	IIaO-E	91.5	22°F	22:15	23:28	C	1h 13m
40280	HD 51415	06 52.2	+4° 26'	"	"			23 33	02 27	A	2h 54m
40281	HD 1000 54	11° 25.7	+60° 15	G-12	IIaO-E*	131.5		02:32	06.01	B	3h 29m
40281T1	cal step wedge for plate 40281.				IIaO-E*	90 sec					0h 0m
40282	HD 11010°	1h 9.2	+2 19	G 12	IIaO-E	131.7	16°F	06:08	08:51	C	2h 43m
40282T1	cal step wedge for plate 40282				IIIaJ-E	180 sec					0h 0m

Dome Temp.
Focus
Dome Temp.

Dome Temp. 24°F 76%

Focus 0

Dome Temp. 20°F 85%

Transparency Conditions [illegible] windy

210

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
03h26m W	+31°17'	5-8"	6.78	B9	~~8~~-7-7	Ap M	40"/180	Wind	Fine
20 48 W	+22 25		6.11	B8	7-7	"	40"/60*	T. Cl & middle of Box	weak
Dw D19 8 mi @63°F		N2 Burst	7 dm	10 int				Closed Balance of Snow	
" " 10 " "		"	"	"	"		*	middle of box	
26 [illegible] W	+22°22'	3-4	6.11	B8	7-8-8	Ap MF	40"/140		fine
02h47m W	+42°22'	3-4	6.11	A[illegible]	[illegible]-8-8	"	[illegible]/180	Wind very gusty & dome oscillating	±10" Fine
01h 49m W	+5[illegible]		8.0	A1	7-7-7	"	40"/200	Good image on TV at Int. 30	fine
Dw D19 8 mi @68°F								very faint one star is HD 10665 sf	
00h 2m E	+02°04		6.4	A0V	no filter 5-5-5	Sp Fine Fla	40"/60	L.H.S of Box	sl grainy sl weak
Dw D19 4½ mi @68°F		N2 Burst	7 dm	10 int				L.H.S of Box	
								*In middle of box. Part sf	

211

IIIaO E 28115-07016
IIIaJ-E 03075-09016

Date Fri - Sat Jan 16-17 1976 **Observer** WA. - R. // R. - Mor **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40283	HD 217675	22h 57m 19s	+41° 47'	G-12	IIIaJ-E	9/.9	28°F	17:52	19:40	A
40283T1	cal step wedge for plate 40283				IIIaJ-E	180 sec				
40284	HD 14392	02h 14m 24s	+49° 42'		IIa-0B	9/.9		20:52	23:04	B
40285	HD 34364	05h 11m 48s	+33° 39'		IIa-0E	13/.5		23:10	00:24	C
40286	HD 37479	05h 33m 41s	-02° 39'		IIa-0E	13/.5		00:30	01:42	A
40287	HD 86590	09h 54m 24s	+25° 02'		IIa-0E	20/.3		01:51	04:30	B
40287T1	cal step wedge for plate 40254-88				IIIaO-E	90sec				
40288	HD 112014	12h 48m 16s	+83° 58		IIIa-O-E	13/.5		04:49	05:54	C
40289	HD 116656	13h 19.9	+55° 27'		IIIaJ E	9/.9		06:02	06:25	A
40289T1	cal step wedge for plate 40289-90				IIIaJ-E					
40290	HD 130109	14h 41.2	+02° 19'		IIIaJ-E	13/.5	4°F	06:35	07:05	B
40290T1	comparison star	normal			IIIaJ-E	9.5				C
40290T2	"	2x								A
40290T3	"	4x			IIIaJ-E	9.5				B
40290T4	"	8x								C
40290T5	"	normal			IIIaJ-E	9.9				A
40290T6	"	2x								B
40290T7	"	4x			IIIaJ-E	9.9				C
40290T8	"	8x			IIIaJ-E	9.9				A

Dome Temp.
Focus 0
Dome Temp.

Hour Angle End

Dome Temp. 20°F 73%

Focus 0

Dome Temp. +0.3°F 86%

Transparency Conditions windy & hazy

T.V. system worked fine

* overdevelop exposed Box Lid

212

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		03"28W	+42013	3-4	3.63	B6p	no filter 5 5 5	Field *	40/80 *	RHS of Box windy & oscillating wide. * RHS of Box clouds & snow	guiding sl weak
		Dw D19 @ 68°F 8min N2 purged			.7 dm		10 sec				
		04"12W	+50005	4-5	5.44	Ap si	777	Ap Blu	400/320		fine
		03"32W	+33°45		5.82 -6.49	Ap	777	Fd Bin/Bln	400/160		fine
		03"38W	-02°32'		6.32	B3p	777	Bp Bln	400/80	Lid left on	sl weak
		01"57W	+24°42'	4	7.91	dG5	7-7-7	Sp. Bin-Bln	800/200		sl weak
		Dw D19	8min @ 68°F N2 purged		.7 dm		10 sec				
		00"38W	+83°34		5.81	A0	7-7-7	Sp Bin-Bln	400/160		Fine
		00"29W	+51°02		2.27	A0I	no filter 5-5-5	A025 *	40/110	RHS of Box	fine
		Dw D19 4½ min @ 68°F	N2 purged		.7 dm		10 sec *			RHS of Box	
		00"13E	+02°03		3.74	A0II	5.55	Sp Bin-Bln	40/50	RHS of Box	Fine
							15 sec ✓			RH.S	
							30 sec ✓	RHS of Box			
							60 sec ✓	"	"	exposed Box Lid was	
							120 sec ✓				
							15 sec ✓	"	"	up on one side for	
							30 sec ✓				
							60 sec ✓	"	"	a second a two with the	
							120 sec ✓	"	"	lid on	

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IIaO-E 08115-07016
IIIaJ-E 03075-09616

Date Sat-Sun Jan 17-18 1976 **Observer** Hd-R// R **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
40291	HD167	0"01.4	+28° 00'	G-12	IIaO-E	13/.3	08°F	18:04	19 55	A
40292	HD 15256	2 22.3	29 26	"	"	"		19 59	22 38	B
40293	HD 36 [illegible]	7 10 9	26 55	"	"	"		22 45	00.45	C
40293Fl	cal step wedge for	plates 40291 - 40295			IIaO-E	90 sec				
40294 ✓	HD 67402	8h 02.7	+27°47	G-12	IIaO-E	13/.3		00 50	03:20	A
40295	HD 86590	09h 54m 24s (1975)	+25 02' (1975)	G-12	IIaO-E	20/.3		03:30	06:15	B
40296	♄ Boo	13h 53.3	+18 03 3	G-12	IIIaJ-F	9/9		06:24	07:10	C
40296Fl	cal step wedge	for plate 40296			IIIaJ-F	180 sec				
40296F1	focus test	out on 1/4 in	focus set at		80B	9	-07°F			

Dome Temp. 04°F 62%
Focus 80 B
Dome Temp. -10°F 75%

Transparency Conditions spotty + cold with poor seeing
* R.H.S. of Box = 1

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		03716W	+28° 28'	3	7.50	G9III	7-7-7	S.S.V. List 2 Hd	800/240	Hd SSV List 2	sl. grainy fine
		W 3 40	+29 48°	3	8.32	G5III	7-7-7	"	800/180	lt. of 49	but grainy sl. weak
		04'59W	+26°46	3	7.70	G7IV	7-7-7	"	800/240	good image lt. of 40	fine
		Dw D19 8 mi @ 68°F		Nebulous .7 dia			10 int				
03:20		02°44W	+27°35'	3	8.17	kOIII	7-7-7	List 2 S.S.V. Hd	800/240	? good image lt. of 45	Fine
03:15		03"45W	+24°42'	3-5	7.91	dG5	7 7 7	Sp 13h-13h	800/800	no T.V. the index	sl. weak
03:10		00"45W	+18° 33'	5	3.29	GOIV	5 fish 5 5	Br. Hd. La Bg	40/130 * *	? to the prism is frozen in place so you can't position it	fine
		Dw D19 4½ mi @ 68°F		Nebulous .7 dia			10 int w fish 3-3				sl to Blue

IIaO-E 28115-07016
IIaJ-E 03075-09016

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Date Sun-Mon 18-19 1976 **Observer** Tom-R **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40297	HD217675	22h57.8m	+41°47	G-12	IIIaJ-E	9/.9	~~22°F~~	17:50	18:14	A
40298	HD 28363	04h23.3	+15°57	G-12	IIaO-E	9/.3		18:30	20:12	B
40299	HD 30869	04h46.2	+13°29	G-12	IIaO-E	9/.3		20:20	21:39	C
40300	HD 27383	04 14.2	+16°18	G-12	IIaO-E	13/.3		21:44	23:14	A
40301	HD30869	04h46.2	+13°29'	G-12	IIaO-E	9/.3		23:20	00:44	B
~~40302~~	~~HD 86590~~	~~9h54m 2s~~	~~+05°02~~	~~G-12~~	~~IIaO-E~~	~~13/.3~~		00:50		C
40302T1	cal step wedge	for plate 40297			IIIaJ E	13 sec				
40302T2	cal step wedge	for plates 40298-40301			IIaO-E	90 sec	~~103°F~~	~~setting 70 B~~		
40302T3	diffuser test	and cal / wedge			IIaO-E	13		setting 70 B		B
40302T4	comparison test					June 29, 1976				A
40302T5	comparison test	" with T-V prism blocked out in place								B
40302T6	"	" with T-V prism + hood blocked out in place								C
40302T2	"	" with T-V prism out of position unblocked								A
40302T8	"	" with T-V prism out of position blocked								B
		" with black paper under prism covering Star window								A

Dome Temp. +040F 56%

Transparency Conditions ~~excellent~~ ~~exposed~~ Bar T3

Focus 70B

Dome Temp. .....

26

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		02h50W	+42° 13	2	3.63	B6p	no filt 5-5-5	Sheet	40/90	RHS. of 2 good image Lte at #13	sl grainy fine
		00h44E	+16° 09'	2"	7.12	F8	7-7-7	Hyades Bar Prog. Trn	40/140	good image Lte at #5	sl strong
		00h20W	+13° 38	2"	6.77	F5	7-7-7	"	40/140	good image Lte at #5	sl strong
		02h27W	+16° 29		7.44	F8V	7-7-7	"	40/140	good image Lte at #5	fine
		03h24W	+3° 39'		6.77	F5	7-7-7	"	40/140	" " "	sl strong
					7.91	dG5	7	~~Sp Bar 3.5~~	~~800~~	" " #5	
		Dw 4½ min	D19 @ 68°F	No band	after 10 min					closed dome	
		Dw 5 min	"	"	"		"	"			
											sl wind
							2 min			Three faint short weak comp lines in star window and beyond outer tips of strongest Fe I lines; origin unknown — scattering on dome inside spectrograph	
							2 min				
							2 min				
							2 min				
							2 min				
		TAD with Filt.					2 min				
			This is not new, since Just that last plate Dec 9/69 +35°842 T9 also shows the effect								

22X

Date Wed-Thur Jan 21/22 76 **Observer** Bat-Tm **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle East
40303	HD 5777	06 52.2	+42 21'	GL	I-a-0	9/5		00 42			

Dome Temp. +14 H= 90%

Focus .....

Dome Temp. .....

Transparency Conditions 218

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
				~~5-6~~	~~6.6~~	~~A0~~	~~8-~~	~~Ap MR~~	~~400/25~~	SNOW 1" nothing.	
									scrapped	northwhile	
										Closed 02h	

219

IIa-O-e 28115 - 18016 From new Nr. for only evacuated
* IIIa-J-e - 20016 For Tests

Date Sat Sun Jan 24-25 76 Observer Ig - Waterloo Later Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40303	HD41335	05 59·3	-6 42	G12	IIIa-0e	B1·5	+7°F	00:02	00:40	B	2 33 W
40303 T1	Cal for 40303			90sec	"						
40303 T2	Comparison Test for scat Light			G12	"	13/1.5	normal			C	
40303 T3	"	"	"	G12	"	13/1.5	(grating cover blackened with black cloth)			C	
40303 F	Focus Test			G12	IIIa-O	13				B	
↓ Jan 28/76											
40303 T4	Comp Test	Hartmann out posn		G12	IIIa-J-e*	13/1.5				B	
40303 T5	"	Hartmann in posn		G12	"	"				B	
40303 T6	"	normal		G12	"	"				E	

Dome Temp. 40°F H=95%

Focus 80-B

Dome Temp. .....

Transparency Conditions Semi - Clear
then cloud by 0:30

* Push - at For Left of Exp Box.

226

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	B	2 33 W	- 6 34	2"	5:16	B Z IV Vnne	6-7-6	Shell star	400/95	* Hazy very high - (700 long)	
		6 03								*	
	C						1 min	no filter		3 at Right of Exp Box	
	C						1 min	no filter		Do the same as 40302 T3-78 I guess	
	D	in in / out out					3/3	no filter		*	
										Snow	
	E	blocking inner Exp meter mirror					4 min			ST 8 36	
	I	blocking outer Exp meter mirror					4 min			6 03	
							2 min			2 33 W	
										Dew by hand 8 min	
										D19 @ 68°F	

221

*03075-00000

Date 29 JAN 1976 Observer B.L. Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40303 S1-1	Strip Recalibration	Spot	Plate		IIIa-J*	4		20 min			
40303 S1-2	"	"	"		"	"		"			
40303 S1-3	"	"	"		"	"		"			
40303 S2-1	"	"	"		"	"		5 m			
40303 S2-2	"	"	"		"	"		"			
40303 S2-3	"	"	"		"	"		"			
40303 T7	Calibration	Step Wedge			"	120 s					
T8	"	"	"		"	240 s					
T9	"	"	"		"	360 s					
T10	"	"	"		"	~360 s					
T11	"	"	"		"	480 s					

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions .....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
					4300 Å		20 Volts			Box # 2	
					"		"				
					"		"			Dew N_2 burst .7 dur.	
					"		"			10 sec int. 4½ cm.	
					"		"			DIS 69 =	
					"		"				

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Fri - Sat

IIa-O-e 03094 - 25016
IIIa-J-e - 20016

Date 30-31 JAN - 1976 **Observer** Tn-Wtn / Tn-Mor **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40304	HD 28363	$04^h 23^m.3$	15° 57'	G12	IIa-O-e	9/1.3	17°F	20:25	23:05	A	02 58 W
40304T	Cal for 40304 - 08,10		90sec		"						
40305	HD 41335	$05^h 59^m.3$	-06° 42'	G12	IIa-O-e	13/.5		23:10	23:52	B	02 11 W
HO306	HD 86590	$09^h 54^m.4$	25° 02'	G12	IIa-Oe	13/.3		~~23:58~~	02:52	C	01 13 W
		This B Time would be more appropriate						00:20 ↗ due			to 30m
40307	HD 112014	$12^h 48^m.3$	83° 58'	G12	IIa-O-e	13/.5		03:07	04:32	A	00 02 W
40308	HD 112028	12 48.4	+83 57'	"	"	"		04:33	05:15	B	0 45 W
40309	HD 116656	13 19.9	+55 27	"	IIIa-J-e	9/.9		05:30	05 55	C	00 53 W
40309T	Cal for 40309			180sec	"					A	
40310	HD 116657	13 19.9	+55 27	G12	IIa-O-e	9/.9		05 56	06 30	A	01 29 W

Dome Temp. 14° F 86%

Focus 90-B

Dome Temp. .....

Transparency Conditions very good - sl haze

Ending Time EST	PH	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
3:25	A	02 58 W	+16 10	3-5	7.14	F8	6-6-6	Sp Bin - Bln	400/110		fr s/ wk
		Dew 8mm	NE Bank	Dig	.7 dur 10 sec int						
3:52	B	02 11 W		2-4	5.16	B2 IV	6-6-6	Shell star	200/70		str sng Fine
2 52	C	01 13 W		2-3	7.91	dG5	6-6-6	Sp Bin - Bln	800/≈160	some cloud	v s/ wk
due		to 20 min screw up at the begin (not many counts 1st 20 mins)									
4 32	A	00 03 W	+83 33	2-3	5.81	A0	6-6-6	Sp Bin - Bln	200/70	North star of pair	s/ strong
5 15	B	00 45 W		"	5.3	A2	6-6-6		200/70	South star Cloud	s/ Strong
5 55	C	00 53 W		"	2.27	A2V	no filter 5-5-5	A225	40/110	some cloud * At Right	s/ Strong
	A	Dew 4½ mm Dig NE Bank			.7 dur 10 sec int					" *	
6 36	A	01 29 W		2"	3.8	A2	6-5-7		40/24	Cloud & Smog	Fine

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IIa-0-e 03094-25016

Date 2-3 Feb 1976 Mon-Tues Observer Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40311	HD 26571	04 07.0	+22 09	G12	IIa-0-e	91.5	+7°F	18 20	20 02	A	0 22W+
40311T	Col No. 40311-14			90sec	"						
40312	HD 51418	06 52.2	+42 26	G12	"	91.5		21:57	00:05	A	1 24W+
40313	HD 86590	09 54.3	+25 02	"	"	181.3		00 10	02:35	B	1 22W+
40314	HD 121247	13 49.2	+42 41	"	"	131.5	+9°F	02 42	05:05	C	0 4E+

Dome Temp.
Focus 9
Dome Temp.

Dome Temp. +12°F H=78% **Transparency Conditions** Some thin cloud High winds

Focus 90-8

Dome Temp. +5°F H=90%

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	TV Frames	Quality
0 02	P	0 22W	+22 24	3"	6.1	B8	7-7-7	Ap-MR	400/120	cloud c snow	2x	Fine
[illegible] 5	A	1 38 W	+42 22	2-3	6.61	A0	7-7-7	Ap MR	400/175		2x	Fine
35	B	1 08 W	+24 42	"	7.91	d65	5-5-5	Sp Bin-Blm	400/105		4x	Fine
5 05	C	0 14 E	+42 19	2"	6.69	A1	6-6-6	Am MR	400/90	cloud	2x7	[illegible] sl wk
										Tel won't stay in Dec		
										c wind has calmed		
										down some.!??		

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IIIa-0-e 03094 −25016
IIIa-J-e −20016

Date 4-5 Feb 1976 Wed-Thurs **Observer** Sho-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40315	HD 14392	02 14.4	+49 42	G12	IIIa-0-e	9'.9	23°F	18. 17	19:49	A	29W
40316	HD 37479	05 33.7	−2 39	"	"	13'.5		19:57	21:14	B	01W
40316 T	Cal for 40315, −18, 21, 22			90sec	"					C	
40317	HD 37468	05 33.7	−2 39	G12	"	13'.5		21:19	21:30	C	03W
40318	HD 48915	06 40.8	−16 35	"	"	9'.9		21:37.2	21:38.5	A	01E
40319	"	"	"	"	IIIa-J-e	"		21:47	21:53	B	01E
40320	Mars	04 58.2 1976	+25 40 1976		"	"		22:01	22:15	C	15W
40320T	Cal for 40319, 20				"						
40321	Saturn	08 01.8 1976	+20 49 1976	G12	IIIaO-e	9'.9		22:44	22:50	A	01W
40322	HD 34364	05 11.8	+33 39	"	IIIa-0-e	13'.5		23:14	00:01	A	42W

Dome Temp. 20°F H = 65%

Focus 95-R

Dome Temp. 15°F H = 85%

Transparency Conditions Very good

Reading Time E.S.T	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
19:49	A	2 09 W		2-4	5.44	Ap Si	7-6-7	~~Eq~~ HeSi	200/135	63 And	Fine
21:14	B	0 17 W	−2 32	"	6.32	B3p	6-6-6	HeSi	200/58	γ Ori E cloud	Fine
		Dew 8 Hz min D19 Dz bumt .7 dew 15 int 65°F									
11:30	C	0 33 W			3.51	095 V	7-7 7	Sp Bin-Eh	200/60	cloud	Fine
3815	A	0 25 E			-1.6	A0	9-10		40/23	(26 44.1 & -16 41) 15 G	gusting
21:53	B	0 11 E			"	"	not f. Hor 6-9		40/99		Fine
22:15	C	1 57 W	+25 41				not f. Hor 8-8		40/170		sl str
		Dew 4½ m D19 Dz bumt .7 dew 15 int 68°F								(Wind Direction)	
23:50	A	0 32 W					7-7-7		40/25		Fine
1:21	A	4 23 W		3"	5.8-6.5	Ap	6-12	Ec/Bin-Sho	400/65	cloud again	gusty weak

229

IIaO-E 03094-05016
2 8115-05026 IIIaJ-E -20016

Date 6-7 FEB 1976 FRI-SAT **Observer** Ri-Wtn / MOR **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40323	HD217675	22h57m3	+41° 47'	G-12	IIIa-J	9/.9	20°F	18:21	19:47	A
40324	HD34364	05h11m8	+33° 39'	G-12	IIa-O	13/.5		21:24	22:47	B
40325	HD73731	08h34m7	+19° 54'	G-12	IIa-O	13/.5		23:20	00.43	C
40325T1	cal step wedge for plate 40323			180 xe	IIIaJ-E					
40325T2	cal step wedge for plate 40326				IIaO-E	90 xe				
40326	HD112014	12h 48m 16s	+83 58'		IIaO	13/.5		02 20	03: 05	A
40327	HD112028	12h48.4	+83 57		IIaO-E	13/.5		03:10	03: 37	B
40328	HD116656	13h19.9	+55°22	G-12	IIIaJ-E	9/9		03.44	04:00	C
40329	HD119786	13h40m12s	-15° 16'		IIaO	13/.5		04:18	05:44	A
40330	HD151676	16h43m42s	-15° 30'		IIaO	13/.5	14°F	05:54	06 45	B
40330T1	cal step wedge for plate 40327				IIaO-E	90 xe				
								1.4		

Dome Temp. 34
Focus 19 B
Dome Temp. 1

Hour Angle End
05 35W
03h20 +3
03h18 +3

NO T.V. System

Dome Temp. 24°F 74%

Focus 19 B

Dome Temp. 12°F 86%

Transparency Conditions scattered clouds hazy

230

* R.H.S. of Box overdeveloped exposed Box #1

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
19:47	A	05 35W	+42°15'	3	3.63	B6p	no filter 5-5-5	Steel YBL	40/68 *	* clouds, clear, clouds	Fine
22:49	B	02°17W	+33°38'	3	5.82-6.49	Ap	7-7-7	Ecl. Bin-Bln	400/160	clouds Broke 3 pieces dew by meas 8 min D19 @ 68°F	Fine
00:43	C	00°52W	+19°44		6.38	Am	7-77		400/160 *	* clouds + snowflurries	Fine
			Dew 8 min D19 @ 68°F				N_2 purge .7 dur 10 int				
			" "			"	"	"			
03 05	H	00"58E	+83°34'		5.81	A0	7-77	Sp Bin-Bln	400/148	north	slgrainy Fine
03 37	I	00"25E			5.3	A2	7-7-7	Sp Bin-Bln	400/150	south new loop of Plate	slweak
04 19	J	00"35E	+55°06		2.27	A2V	5-5 no filter	A225*	40/110 *	R.H.S.	slgrainy Fine
05 04	K	00°49W	-15°32'	5"	6.15	A0	7-7-7	Sp Bin-Bln.	400/140	the top of P.H came lose	½ plate slweak
05 55	L	01"15E	-15°34'		6.19	A3	7-7-7	Ecl. Bin-Bln	400/110		slweak
			Dew 5 min D19 @ 60°F No purge								

23

Date 8/9 FEB 1976 Observer Tnr/Ri Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40331	HD 30869	$4^h 46^m.2$	$+13° 29'$	G-12	IIa-O-e	9/1.3	25°F	20:34	22:17	A	
40332	HD 28363	$4^h 23.3$	$+15°57$	G-12	IIa-O-E	13/1.3		22 22	00.18	B	
40333	HD 86590	$09^h 54^m.24^s$	$+25°02$	G-12	IIa-O-E	20/1.3		00:27	03:05	C	
40333	calotype wedge					90 sec					
40334	HD 97937	$11^h 10^m 44^s$	$+13°23$	G-12	IIa-O-E	13.5		03:11	05:13	A	

Dome Temp.
Focus
Dome Temp.

NO T.V System for the first half of the night

Dome Temp. 28°F 86%

Focus 90.2

Dome Temp. 28°F 95%

Transparency Conditions hazy

232

Ending Time E.S.T	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
22[illegible]	H	02422W	+13° 40'	3"	6.77	F5	7-7-7	Hyad bin.	400/120		Fine
01[illegible]	H	04446W	+16° 11	3"	7.12	F8	7-7-7	"	400/120		Fine
3	H	02403W	+24°43'	3"	7.91	dG5	7 7 7	Sp Bi-Bk	800/240		Fine
		Dw D19	9min @ 68°F		N2 burst						
05 3	L	02455W	+13°02'		6.49	AGn	7-7-7	Sp Bi-Bk	400/160	clouds	st guiding Fine

237

IIIaJ-E 20016
IIaO-E 28115-08026

Date Wed/Thurs Feb 11/12 1976 Observer Shp-Ri Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40335	f Cam HD 49105	06h 31 56	+16° 29'	G-12	IIIaJ-E	91.9	36°F	18:32	19:03	A	
40336	"	"	"	"	"	"		19:05	19:34	B	
40337	"	"	"	"	"	"		19:36	20.00	C	
40338	"	"	"	"	"	"		20:01	20:14	A	
40339	HD 37479	05h 33.7	−2° 39'	"	IIaO-E	13/.5		20.24	21:40	B	
40339T1	ad objs w.fgd				IIIaJ-E						
40339T2	" "				IIaO-E						

Dome Temp. 34°F 74%

Focus 80 R

Dome Temp. .....

Transparency Conditions .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02h25E	+16°28'	3	1.93	AoIV	5 5 5		40/204	R.H.S of Box ~5° S of Moon BROKEN 2 PIECES	Fine
01h55E	"		"	"	5-5-5		40/200	R.H.S. of Box	Fine
01h30E	"		"	"	5-5-5		40/150	RHS of Box	Fine
	"				5-5-5		40/50	RHS of Box clouds	Fine
01h11mW	-2°31'	5	6.32	B3p	7-8	~~Rgo~~ HeSi	400/49	clouds, term. by snow	weak
Dew 5½ min	Dig @ 66°F	"	N2 purge	"				RHS	

Ending Time E.S.T. P.H.

235

IIa-Fe 03075 - 19026

IIaOE 18016 - 05026
IIaOE* 28115 - 08026

Waterloo

Date Sat/Sun Feb 14/15 1976 **Observer** CM - B.t **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	How Angle End
40340	HD 32297	4h 55.6m	+28° 32'	G-12	IIaOE	13.5	32°F	19 16	22 51	A	
40340 T	Cal Step Wedge		90 sec		"	for 40340					
40341	HD 74579	8h 41.5m	+6° 4'	G-12	IIaOE*	"	30°F	22:59	23:17	B	
~~40342~~	~~HD 74579~~	~~8h 39.2m~~	~~+2° 44'~~	~~G-12~~	~~IIaOE*~~	~~9/5~~		~~23:38~~		C	
40341 T1	Cal Step Wedge		90 sec		IIaOE*	for 40341		(labelled 42T)			
40341 S1-1	Spot Calibration		exposed 20/2/76		IIa-Fe	3	15°F	10m			
S1-2	"	"	"		"	"		"			
S1-3	"	"	"		"	"		"			
S2-1	"	"	"		"	2		"			
S2-2	"	"	"		"	"		"			
S2-3	"	"	"		"	"		"			
40341 T2	Cal. Step	Wedge	5m		"						
T3											
T4											
T5	Cal. Step	Wedge	150s		"						
T6											
T7											

Dome Temp. 35°F 73%

Transparency Conditions VERY HAZY - THIN CLOUD

23C

Focus 70-R

Dome Temp. .....

NO T.V.
-Not integrating

Ending Time E.S.T. P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	3h 10m W	+26 42	5"	7.28	F5	7-7-7	Coor. Wk. (Lake)	10"/500	Cloud	Fine
	30 0	+06 34	3'/4"	3.98	F8	7-7-7	"	40c/202	thick haze	Fine
				~~3.8~~	~~F5~~	7-	Bin bright Spec binary		~~about 10° from full moon~~	
									Cloud!! Cloud 00/10	
						Hx		15V	Dew Dn 4½m @ 6:45 F	
						"		"	Rebound	
						"		"		
						"		"		
						"		"		
						"		"		
						"		"		
									Warren	
									Plates 28115-08026 are B F	
									slightly too long - barely	
									fit in plateholders.	

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IIaF E 03075 03125
IIaO E 23115 - 0X026

Date FRI/SAT Feb 20/76 **Observer** But - Wtn/MOR **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40342	HD34364	$05^{H}11^{M}.8$	$+33°39'$	G-12	II-a-~~O~~E	13/.5	36°F	18:40	20:09	A	$0^{H}37^{M}W$
40342 T	Cal Step Wedge		90 sec		IIaOE						Dw DM
40343	HD45542	$06^{H}23^{M}.0$	$+20°17'$	G-16	IIaF-E	13/.5	36°F	22:58	23:42	B	0.57W
40344	"	"	"	"	"	"		23:44	00:25	C	0.39W
40344 T	Cal Step Wedge		5 min		IIaFE						D. DM
									1.5		

Dome Temp.
Focus
Dome Temp.

Dome Temp. 37F 75B

Focus 70 R

Dome Temp. 85B

Transparency Conditions Good then Cloud

TV is working

238

Ending Time EST.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	VOLT / INT	REMARKS	Quality
20:09	F	0H 37MW	+34 46	5"	5.82 -6.49	Ap	7-7-7	Ecl. Bin-Bin	200/68	42 / 6	RH3 Box 1	sl. guiding Fine
		Dew D19 8 min	69°F	by hand								
21:12		02 57W	+20 15	5"	4.04	B7IIIe	NO FILTER 5-5-5	Sp. Bin-Bin	40/45	30 / 2	Middle Exp. #1	comparison a little thin Fine
00:03		03 40W			"	"	5-	"	40/34	"	High humidity	Fine
		Dew D19 4½ min	66°F	by N2 hand								

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IIa-Fa 03075-03125
IIIaJ-E
IIaO-E 28115-08026

Date 22/23 FEB 1976 SUN/MON **Observer** Bla-Ri / Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40345	HD 47105	06 31.9	+16°29'	G16	IIa-Fa	13/1.5	28°F	19:16	21:35	A
40346	HD 47105	06 31.9	+16°29'	G16	IIa-Fa	13/1.5		21:36	21:49	B
40347	HD 47105	06 31.9	+16°29'	G16	IIa-Fa	13/1.5		21:50	22:33	C
40347T1	cal step wedge for plates 40345-40348				IIa-Fa	5 min				
40348	HD 47105	06 31.9	+16°29'	G-16	IIa-Fa	13/1.5		22:34	22:53	A
40348T1	grating tilt test HD 80493				IIaO-E	G16 grating tilted down				B
40349	ℓ Lyn & θ UMa A	09h14m38s	+34°49	G12	IIaO-E	9/1.9		23:35	00:31	C
40350	HD 82328	09h26m10s	+52°08		IIIaJ-E	9/1.9		00:36	02:17	A
40351	γ UMA HD 103287	11h48m34s	+54°15'		IIIaJ-E	9/1.9		02:21	03:03	B
40352	8 UMA HD 106591	12h10m29s	+57°35	G-12	IIIaJ-E	9/1.9		03:09	04:35	C
40353	ℓ DRA HD 137759	15h22m42s	+59°19'	G-12	IIaO-E	9/1.9		04:41	05:30	A
40354	β Sco HD 144217	15h59 37	-19°32	G-12	IIIaJ-E	9/1.9	10°F	05:42	06:32	B
40354T1	cal step wedge				IIIaJ-E		180m			
40354T2	cal step wedge				IIaO-E		90m			

Dome Temp. 20° 81%

Focus 85 R

Dome Temp. 10°F 81%

Transparency Conditions good hg poor seeing

240

Ending Time EST	PH	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	VOLT/INT.	REMARKS	Quality
35	A	00h50W	+16° 27′	4-5	1.93	AOIV	5-5-5 no filter	Std. Star	40/400	2.2/4	clouds R.H.S	plate upside down
49	B	01h03W	+16° 27′		1.93	AOIV	5-5-5	Std. Star	40/50	3.6/6	R.H.S	Fine
33	C	01h49W	+16° 27′		1.93	AOIV	5-5-5	Std. Star	40/200	3.6/6	R.H.S	Fine
		Dew 4½ in D19 @ 6.0°F			No hunt						R.H.S.	Fine
53	A	02h08W	+16° 27′		1.93	AOIV	5-5-5	Std - Star	40/100	4.6/20	R.H.S	Fine
am	B	maximum amount					25 sec					
31	C	01h02W	+34° 31	5-8	4.71	MOIII	7-7-7 no filter	Brig. Star Prog	40/45			Fine
17	A	02h27W	+51° 50′		3.65	F6IV	5-5-5	Brig. Star Prog	40/130		middle of Box	Fine
03	B	01h02W	+54° 52′		2.44	AOI	5-5-5	" "	40/107		middle of Box	Fine
35	C	02h18W	+57° 12′	8	3.37	A3V	5-5-5	" "	40/105		middle of Box	Fine
30	A	00h03E	+59° 04′		4.46	K2III	7-7-7 no filter	" "	80/75			Fine
32	B	00h20W	−19° 39	5-8	2.56	B0.5V	5-5-5	" "	40/95		middle of Box	sl weak
		Dew 4½ in D19 @ 6.5°F			No hunt						middle of Box	
		Dew 3 in D19 @ 6.5°F			by hand							

HAO-E 2815-20026

241

Date Mon 7-16-23-24/76 Observer Hd. Rc Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40355	HD 66141	7 57.1	+2 36	G12	IIaO	13/.3		22 24	22 56	A	0 W

242

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions ..... poor - clouds at first.

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2:56	A	D 49 W	+2 28	3"	5.5	K3	7,7,7	Std Vel.	20v/46	Clouds, again,	Fine
			Dew by here D19 @ G8 "F 8 min								

243

HD-E 28115-02026

Date Feb 25/26 Wed-Thurs 76 **Observer** Rut - Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40356	HD 26571	04 07.0	+22 09	G.12	IIaOE	91.5	46°F	18:44	21:11	A
40356 T1	cd silhouette									

Dome Temp. 44
Focus 60
Dome Temp.

Hour Angle End

Dome Temp. 44°F 72%

Focus 60R

Dome Temp. .....

Transparency Conditions .....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
31.1	A	03h02w	+22023'		6.11	B8	7-77	Ap MR	4/00/120	clouds Bursts 2 pieces	slweak
			Dr Symbol Dq @ 69°F Emi								

245

Date Feb 27/76 FRI-SAT Observer Sho-Wtan Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
~~403575~~	~~HD 133209~~			G-16	IIaF	13.9	~~3~~ 30				
403575T-1	Calibration	Spot Plate			IIa-Fe	1		8m			
T-2	"	" "			"	"		"			
T-3	"	" "			"	"		"			
403575 2-1	"	" "			"	"		2m			
-2	"	" "			"	"		"			
~~-4~~ -3	"	" "			"	"		"			
403575 T1	Calibration	Step Wedge			"		300s				
T2	"	"			"		"				
T3	"	"			"		"				
T4	"	"			"		150s				
T5	"	"			"		"				
T6	"	"			"		"				

Dome Temp.
Focus
Dome Temp.

Dome Temp. 35°

Focus 65

Dome Temp. H=95%

Transparency Conditions high hum - some cl.

24c

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
								Ap Sho		No Such Plate	
			exposed 28/2/76				Hα		10"	Dew 67°F D19 N2 [illegible]	
			"				"		"	4½ min .7 dur 10 cm	
			"				"		"	9 p	
			"				"		"		
			"				"		"		
			"				"		"		

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Date FEB 28/29 SAT/SUN Observer Waterloo CAL / Hu Julian Day

Done Temp.
Focus
Done Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
~~4035~~ 57	HD 38670	5h 42.4	+20 50	G12	IIaO-E	13/.5		19:07	2:03	A	
4035 57 1	Calibration	Step wedge			IIaO-E			90 sec			
4035 58	HD 74874 AB	8h 41.5	+6 47	G12	IIaO-E	6/.5		22:58	23:16	B	0 48 W
~~4035~~ 59	HD 7827	1h 02.5	+32 06	G12	IaoE		33	23:29	~~01 03~~	C	1 3 W
								Approx →	01 24		
								-1 21			

(0)

Dome Temp. 80°F 70% H

Focus .....

Dome Temp. 100% H ot end

Transparency Conditions hazy, intermittent cloud

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
(39) W	+20 55		5.02	B9	7-6	Close Vis Bin (Bakos)	400/107	clouded out [illegible]	Fine
				Dew	8 min	D19 Nebunt	68°F		
0.48W	+6 35	1-2	3.9	F8	7-7	Close Vis Bin (Bakos)	400/200	clearing	slit
1.25 W	31 45	2-3	10.6	F5	7-7-4	"	400/119	field drawn - haziness moving in cloud!!	Fine
				Dew	DR 12min	Nebunt	68°F	← over develop	
								both at right end of box	

244

Date Nov 4 1976 Observer R Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40359 T1	grating tilt test			G-12	IIaFe	13				A	
40359 T2	"				IIaFe					B	
T3	"				IIaFe					C	
T4	"				IIaF					A	
T5	"				IIaF					B	
T6	"				IIaFe					C	
T7	"				IIaF					A	
T8	"				IIaF					B	
T9	"				IIaF					C	
T10	"				IIaF					A	
T11	"				IIaF					B	
T12	"				IIaF					C	
T13	"				IIaF					A	
T14	"				IIaF					B	
T15	"				IIaF					C	

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions .....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	A						no filter 15 sec	0.000 B			
	B						15 sec	0.100 B			
	C						"	0.200 B			
	A						"	0.300 B			
	B						"	0.400 B			
	C						"	0.500 B			
	A						"	0.600 B			
	B						"	0.700 B			
	C						"	0.800 B			
	A						"	0.875 B		limit N grating tilt	
	B						"	0.475 B			
	C						"	0.450 B			
	A						"	0.425 B			
	B						"	0.375 B			
	C						"	0.350 B			

251

28115 - 20026

Done Temp.
Focus 90
Done Temp.

Date Mar 6-7/76 Sat-Sun **Observer** TN **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
4039 ~~0~~ 60	HD29139	04 30.2	+16 18	G12	IIa-O-e	13/.5	30°F	21:03	21:06	A	03 W
4039 ~~1~~ 61	HD84441	09 40.2	+24 14	"	"	"		21:16	21:30	A	01 33 E

252

Dome Temp. 30°F Hi 70%

Focus 90-R

Dome Temp. .....

Transparency Conditions Semi clear, then solid cloud

Ending Time EST	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
21:06	A	03 13 W		3"	2.39	K5III	7-15	Std Vel	40/24		Fine
21:30	A	01 33 E	+23 57	"	3.76	G0II	7-7-6	std vel	40/9	cloud	Vsl wk Sl grng
		Dew 8 min DIG @ 68°F		N2 burst.							

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Em 28115-20026

Date Mar 7-8/76 Sun-Mon Observer Sho-Tn Julian Day 27

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40362	HD 37479	05 33.7	-2 39	G12	IIa-O-c	13|.4		19:58	21:05	A	2.3W
40363	HD 86590	09 54.3	+25 02	"	"	18|.3		21:16	22 40	B	0.5E
40363T1	Cal for 40362				"	90sec					
40363T2	Cal for 40363				"	90sec					

Dome Temp.
Focus 90
Dome Temp.

Dome Temp. 28°F H=807

Focus 90-R Tilt = .525B

Dome Temp. 22°F

Transparency Conditions Clear by 19:30

Ending Time E.S.T	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
21:05	A	2 13W	-2 30	3-4	6.32	B3p	7-7-7	He Si prog	400/125		Fine
22 40	B	0 30E	+25 15	3"	7.91	d65	7-7-7	Rod Star	800/140	*Push - Snow	S/W
		Dw B mins @ 69°F Dig No bumps									
		2 mi " " " " "								*Push	
										* At Far right box #4	

55

En 28115-20026

Date Mar 8-9/76 Mon-Tue Observer NL-Tm/Bud-Tm Julian Day 10:4

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40364	63 Tau HD27749	04h 17.7m	+16° 33′	G-12	IIa-0e	13/.5	28°	19:01	19:55	B	2.2 W
40364T	Cal for 40364-68			90sec	"						
40365	HD 51418	06 52.2	+42 26	G12	"	9/.5		20 12	21:35	C	1.2 W
40366	HD 76216	08 49.7	+58 36	G12	"	"		21 39	23:25	A	1.2 W
40367	HD 100054	11 25.7	+60 15	"	"	13/.4		23 34	02:55	B	2.1 W
40368	HD 128092	14 29.9	+43 27	"		9/.5		03:00	05:26	C	1.9 W

Dome Temp.
Focus 90
Dome Temp.

Dome Temp. 28°
Focus 90-R
Dome Temp. 20°

Transparency Conditions clear mist clds faney
SAW comet West.
very long tail 5°

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
9:55	B	2 23 W		2-3	5.64	Am	7-7	MK Std (MR)	200/90		Fine
		Dw 8 min DIA @ 65°F			N_2 burst						
21:35	C	1 27 W	+42 24	2+3	6.61	A0	8-8-8	Ap MR	400/180		v sl grng Fine
23:25	A	1 20 W	+58 21	3"	6.96	A2	8-8-8	Am MR	400/180		Fine
02:55	A	2 15 W	+59 52	2-4	8.0	A1	7-7-7	"	800/280		Fine
05 26	C	1 94 W	+43 12	2+3	6.88	A2	8-8-8	"	400/180	cloud then clear	Fine

N57

Em 28115-20026

Date Tues-Wed Mar 9-10/26 Observer KL — Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40389	HD48638	6 39.3	27 47	G12	IIaOe	13/.3	29 F	18 55	19 57	A
"	"									

Dome Temp.
Focus
Dome Temp.

Hour Angle End

Dome Temp. 30°F

Focus 90-R

Dome Temp. .....

Transparency Conditions cloud sg 20° from South

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
19 57	A	W 6m	+27 46	2	8.4o	K2 III	7,7.5	SSV List II	800/150	cloud * Push!	Wk
		\									
										+	

IIIa-Je Em 03075-05026
IIa-F-e Em 03075-04036

Dome Temp. 3
Focus 9
Dome Temp.

Date Wed-Thurs Mar 10-11/76 **Observer** Sho-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40370 40400	HD137909	15 23.7	+29 27	G12	IIIa-J-e	9/9		0 02	1 31	A	2 57
40370T	Cal for 40370			180sec	"						
40371	"	"	"	G 12 24	IIa-F-e	9/9		1 35	2 27	B	2 01 E
40371T	Cal for 40371			5 min	"						
40371F	Focus			G12	IIa-O	9	30°F			B	

Dome Temp. 33°F ↑ 90% Transparency Conditions Hazy

Focus 90-R

Dome Temp. .....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1 31	A	2 57 E	+29 14	2:4"	3.66	F_p	70 Filter 4-6-5	A_p – Sh_D	200/690	some cloud from N	Fine
2 27	B	2 01 E	" "	2:4"	"	"	70 Filter 5-5-5	"	200/400	Gr set .55B * At far right	Fine
					Prob unexposed → note Ep meter badly unbalanced					* box # 3	
	K						3/3			α 1975.12 29.6 δ +24 47	

90

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IIIa-J e Em 03075-05026
IIa-O e Em 28115-08036

Date Thurs 11/12 MAR 1976 **Observer** B/S-Tq **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40372 40402	HD47105	06H 31.9	+16° 29'	0.45° 5-1/2	IIIa-J E	13/.5	28°F	18:50	19 02	A	0 33E
40373	HD47105	"	"	"	"	"		19:03	19 07	B	0 17E
40374	HD22562	03 43.2	+23 50	"	IIIa-O E	9/.5		19 12	20 05	C	3 18W
40375	HD42087	06 03.7	+23 08	"	IIa-O E	18/17		20 08	20 49	A	1 32W
40375 T	Cal for	40374,5		90sec	"						
40376	HD86590	09 54.3	+25 02	G12	"	18/.3		20 49	22 57	B	0 0
40376 T	Cal for 40372,3			180sec	IIIa-J e						
40377	HD112014	12 48.3	+83 58	G12	IIa-O e	13/.5		23 06	23 37	C	2 11E
40378	HD86590	09 54.3	+25 02	"	"	20/.3		23 46	02 13	A	3 16W
40379	HD112014	12 48.3	+83 58	"	"	13/.5	20°F	02 22	02 48	B	1 0W
40380	HD161321	17 39.7	+14 27	"	"	"		02 58	03 51	C	2 50E
40381	HD170000	18 22.2	+71 17	"	IIIa-J e	13/17		04 21	05:1[illegible]	A	[illegible]
40382	HD217675	22H 57.3	+41 47	"	"	9/.5		05:21	06 02	B	0 55E
							"				

Dome Temp
Focus 90-
Dome Temp.

Dome Temp. 22°F 57%

Focus 90-R

Dome Temp. .....

Transparency Conditions Excellent - Some light 2CL

Comet west looks good still
Long tail = 5°

Ending Time EST	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
9 02	L	0 32E	+16 31	3-5	1.93	AOIV	No Filter 5-5-5	Phot. Std.	40/150	* Hf far right of box #4	Fine v string
.7	B	0 27E	"	"	"	"	No Filter 5-10	"	40/35	*	s/wk
20 05	C	3 18W	+24 09	2-4	5.01	138p	8-8-8	GI Shell	200/105		Fine
20 44	A	1 37W	+23 13	"	5.98	B25i	7-7-7	Hu Comp	200/100		Fine
											82
22 57	B	0 0	+24 44	3"	7.91	dG5	7-6-7	Sp Bin-Bin	800/240		s/wk
										* 82	82
23 32	C	2 11E	+83 34	2-4"	5.81	A0	7-7-7	Sp Bin-Bin	400/150	N of interpr	Fine but s/v tricky
02 13	A	3 16W	+24 45	0-3"	7.91	dG5	7-6-5	"	800/200	getting hazy -> cloudy	Fine
02 48	B	1 0W	+83 34	3-5	5.81	A0	7-7-7	"	400/135	No f	Fine grng bad
03 51	C	2 50E	+14 28	2-3	6.07	An	7-7-7	Ecl Bin-Bin	400/140	cloud	v s/wk
	A	02 05E		"	4.18	Apsi	5-10-5	Sp Bin-Bin	200/417	*	s grng Fine
02	B	05 55E	\	4-8	3.65	136p	5-5-5	Bin-Sp-11	40/46	*	s/wk

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*Em 28115-20026
**Em 28115-08036

Date Sat/Sun Mar 13/14 **Observer** CM - TH **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40383	HD 71152	8h 10.7	+24° 52	.490 G12	IIa-0-e*	13/.5	29°F	19 36	21 .18	A	
40384	HD 71153	"	"	"	"	13/.3		21:22	23:42	B	
40385	HD 113022	12h 55.7	+18° 55'	"	"	13/.5		23:48	00:03	C	
40385T	Cal for 40383-85			90sec	"						
40386	HD 119124	13 36.3	+51 02	G12	IIa-0-e**	13/.5		01 10	02:14	B	
40387	HD 136202	15 14.2	+2 09	G12	"	13/.5		02 21	03 10	C	
40387T	Cal for	40386-88		90sec	"						
40388	HD 152863	16 509	+25 54	G12	"	13/.5		03 18	04 25	B	

Dome Temp.
Focus
Dome Temp.

Dome Temp. +27°F 82%

Focus 90-R

Dome Temp. .....

Transparency Conditions Very good

254

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0h 02m W	+24 41	3"	7.18	A3	7-7-7	Close hrs Four Bakoo	400/150	S of pr	Fine
2h 27W	+24 42	2-3"	8.2	G	7-7-7	"	800/250	N of pr haze moving in	Fine
0h 46"E	+18 34	2-3	6.6	F7V	7-7-7	Wide Vis Bin Bakoo.	400/200	some cloud	Fine
Dew DB 8min 61°F		Disbursed						Labelled Hydrostate	
0 15E	+50 40	2-3	6.9	F8V	7-7-7	"	400/200		Fine
0 57E	+1 57	2-3	5.6	F8IV	7-7-7	"	200/100	haze	Fine
Dew on 5min 62°F Disbursed.									
1 09E	+25 52	2-3	7.0	G8III	7-7-	"	200/44	clouded in	very weak

264

IIaO-e Em 28115-08036
IIaF-e Em 03075-14036

Date Mon-Tues Mar 15-16 **Observer** MR-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40389	HD27295	4 13.5	+20 54	G12	IIa-0e	13/15	30°F	18 56	19 20	B	2.20 W
40390	HD26571	4 7.0	+22 09	"	"	91.5		19:22	20:52	C	3.59 W
40390T	Cal for 40389-90			90-ec	"						
40390T1	Past Zero	5 & 3/25	Turns	G16	IIa-Fe	13/15	27°F			A	better
T2	Zero	0				G~~16~~	HB	on 3/4 inch from red		B	Zero
T3		4	Turns			G~~16~~	Hβ	off red end		C	
T4										A	
T5										C	
T6										A	
T7										B	
T8										C	
T9					~~IIa-Fe~~	G16	HB on 7/8 inch from blue.			A	
T10										B	
T11										C	

Dome Temp.
Focus 90
Dome Temp.

Dome Temp. 29°F - 60%

Focus 90-R

Dome Temp. 25°F

Transparency Conditions Some haze

400?

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2 20 W	+21 10	2-4	5.28	Ap	7-7-7	MK std-MR	200/140	At Left of	Fine
3 59 W	+22 26	2-3	6.11	B8	8-8-7	Ap-MR	200/122	cloud Box #4	strong slweak
Bottom	-.128	inch			15sec	no filter		Tests For G16	
zero	-0.000							Tilt	
	+.1							(AT Far right	
	.2							box #4)	
	.3								
	.4								
	.5								
	.6								
	.7								
	.8								
	.9								

(below)
G8 - one twin past C13 ~~(-.7B)~~

G16 - 0.7B

2 hrs Ast 120 class visitors Em IIa-0-e 28115-08036.

Date Tues-Wed Mar 16-17/76 Observer Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40391	HD93813	10 44.7	-15 40	.490B G12	IIa-0-e	9/19	27°F	21 152	22 25	A	1 01E
40392	"	"	"	"	"	"		22:55	23 25	B	0 01E
40392T	Cal for	40391&92		90se	"						

Dome Temp. 26°F H=75%

Focus 90-R

Dome Temp. .....

Transparency Conditions Clear by 20:30 but snow blowing in

Reading Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2 25	A	1 01E	-15 59	2-4	3.9	G8III	8-8-8	Brt star prog	200/180	V Hyg maybe fogged	Fair
3 25	B	0 01E	15	"	"	"	8-8-8	"	200/165	snow still coming in	Fine
										Real snow	

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IIaO E 2911S-08036
IIaJ-E 03075-05026

Date Wed Thu Mar 17-18 1976 **Observer** Sho-Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40393	HD 37479	05h 33.7	-20 39	475 G-12	IIaO-E	13/5		19: 40	20 59	A	00h 47m W
40394	HD 37479	"	"		"	"		21: 00	21 49	B	01° 32m W
40395	HD 87504	10h 00m.3	-12° 35'	475 G12	IIIaJE	"		22: 44	00: 45	C	02h 07m W
40396	HD 143807	15h 57m 26s	+30° 08'	G-12	IIaO E	9/5		00: 57	01: 30	H	03h 02m E
~~40397~~						9/9		~~01: 33~~		B	
40396T1	cal step wedge				IIaJ. E		160 sec				
40396T2	cal step wedge				IIaO-E		90 sec				

Dome Temp. 180F 68%
Focus 90 R
Dome Temp. 180F 90%

Transparency Conditions clear first half
scattered clouds second half
TV system working well

270
exposed Box #1

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
59	A	02h47w	-020 30'	4"	6.32	B3p	7-7	He Si	40/125		slweak
1 49	B	03h 37w		4"			7-14	He Si	400/65		weak
145	C	02h 07w	-120 50'		4.5	B8V	no filter 5-55	Bin Blu	40/83	RHS cloudy	Fene
30	A	03h02E	+29047		502	A0Ip	7-7-7	Ap Sho	200/80		Fene
	B						2	"	200/	total cloud	
		Dew 44 mm DP @ 68°F				N=					
		E m									

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IIaO E 28115-17036
~~IIIaJ~~ E 03?5-05026

Sun 21 March

Date Mon 22 1976 **Observer** Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40397	ψ UMa HD96833	$11^h04^m03^s$	+45°02	G-12	IIaO-E	9/.9	30°F	00:21	01:05	A	01°36 W
40398	ε VIR HD 113226	$12^h57^m12^s$	+11° 30′	G-12	IIaO-E	9/.9		01:11	01:36	B	00°?W
40399	2 VIR HD 116658	$13^h19^m55^s$	-10°38	G-12	IIIaJ E	9/.9		01:40	01:55	C	00°SW
40400	3 VIR HD 118098	$13^h29^m36^s$	-00°05	G-12	IIIaJ E	9/.9		02:01	03:17	A	01°?W
40401	HD130109	$14^h41.2$	+02019′	G-12	IIIaJ-E	13/.7		03:22	04:11	B	01°08W
40402	HD161321	$17^h39^m44^s$	+14° 27′	G-12	IIaO-E	13/.5	18°F	04:24	05:42	C	02°.8E
4041027	cal step wedge				IIIaJ-E	180 sec					
4040272	cal step wedge				IIaO-E	90 sec					

Dome Temp.
Focus 90
Dome Temp.

Dome Temp. 20°F 85%

Focus 90R

Dome Temp. 15°F 84%

Transparency Conditions Hazy and very poor seeing 272

TV system works OK

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS		Quality
[illegible]55	C	01h39W	+44° 39′	10	4.14	K1 III	7-7	Brit Sta Pros.	40/40		Intr/Dark 9/13.0	Fine
[illegible]36	B	00h17W	+11° 10′		3.79	A9 II-III	7-7 no filter	"	40/30		9/13.0	Fine
[illegible]55	C	00h15W	-10° 55′		0.67	B1 V	5 5 5	"	40/110	R.H.S	9/2.0	Fine
[illegible]17	A	01h21W	-000 18′		3.50	A3 Vn	5-5-5	"	40/105	R.H.S	9/2.8	Fine
[illegible]11	B	01h08W	+020 10′	5	3.74	A0 V	5-5-5	Sp Bin - Blu	40/81	R.H.S	9/2.8	Fine
[illegible]42	C	00h18E	+14° 35		6.07	Am	7 7 7	Ed. Bi Blu	400/140	DAWN	9/4.2	slweak
		Dew 4½m DIS Nz burst 68°F								R.H.S		
		" 8m " "										

IIaO-E 28115-17036
IIIaJ-E 03075-05026

933

Dome Temp.
Focus
Dome Temp.

Date Nov-Dec 1976 Nov 22-23 **Observer** MR-Ri/BG-R **Julian Day** 2442860

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40403	HD 26571	04h 7.0	+22° 09	B-12	IIaO-E	9/.5	26°F	19:15	20:15	A	03h 00m
40404	HD 76216	08 49.7	+58 36	"	"	"		20:23	22:11	B	01 46
40405	HD 100054f	11 25.7	+60 15	"	"	13/.4		22:17	01:11	C	3 00
40406	HD 124883	14h 11.0	+28°12	"	IIaO-E	13/.5		01:17	03:10	A	3 47
40407	HD 134 305	15h 04.0	+12° 52	"	"	"		03:13	04:53	B	5 36
40408	HD 148857	16h 25 9	+02012	"	IIIaJ-E	13/.7		04:57	05 20	C	6 32
4040871	cal step wedge for plate 40405				IIIaJ.E	180sec		Dw 4'h min at 3' DIS			6 am
4040872	cal step wedge for plate 40403-40407							" 8 m " "			

Dome Temp. 300°F 82%

Focus 90R

Dome Temp. 300°F 95%

Transparency Conditions good

COMET WEST 2-3 tail ~4m

Ending Time E.S.T	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS		Quality
											trailing / Double	
0 15	4	03h40W		2-3	6.11	B8	7-7-7	Ap-MR	400/160		15 / 4.1	Fine
22:11	8	01 00W	+58 26	2-3	6.96	A2	7-7-7	"	400/180		19 / 4.1	Fine
		01 26W	+59 57	2-3	8.0	A1	7-7-7	"	800/280	BROKEN 3 PIECES just make it out	39 / 4.8	Def. Fine
		00 42W	+27 59	3	7.22	A2	7-7-7	Am-MR	400/180		39/4.8	Fine
		01 33W	+12 43	3	7.24	A7	7-7-7	"	400/180		39/4.8	sl weak
		00 38W	+02° 10'		3.86	A1 II	5-5-5	Sp Bn-BL	40/80	R.H.S	19/22	Fine
		N2 launch								R.H.S		

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Date Thurs Wed Mon Mar 23/24/1975 Observer R. Tomm Julian Day

Dome Temp.
Focus 5.0 R
Dome Temp. 4

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40409	HD 90861	10h 24.3	+29°05	G-12	IIaO/E	13/.3	30°F	22:36	00:33?	A	01°55W
40410	HD 122693	13h 58.3	+25°03	G-12	IIaO-E	13/.3		00:49	01:55	B	00°1E
40411	HD 123782	14h 04.6	+49°56	G-12	IIaO-E	13/.3		02:17	03:19	C	01°23W
40412	HD 140913	15h 41.3	+28°47	G-12	IIaO-E	13/.3	40°F	03:30	05:05	A	01°10W
40412 T	cal step wedge for plates 40409 - 40412										Dew Flo

Dome Temp. ..... Transparency Conditions ..... hazy .....

Focus ..... 80 R .....

Dome Temp. 40°F 88% T.V. system OK for bright stars

Ending Time EST	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
[illegible]	A	01h55W	+28°50'	3-4	8.36	K2III	777	S.S.V. Hd	800/240	start too fast of TV	Fine
[illegible]	B	00h15E			8.74	F8II	7-14	"	800/50	hazy quit to check	ink
03 19	C	01h03W	+49°40'		6.8	M2	7-77	Std Vel	400/162	29/4.0	Fine
05 05	H	01h10W	+28°44'		8.81	G0II	777	S.S.V. Hd	800/100	cirrus clouds again at 05:00	ink
		Dew Point @ 68°F D 19				No bumps.					
										Warren push the nights plates	

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IIa-O-e 28115 -23036
IIIa-J-e 03075 -23036

Date Thurs-Fri Mar 25-26/76 **Observer** B/n-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40413	HD 37468	5 33.7	-2 39	G12 (490)	IIIa-J-e	13/.5	48°F	19:05	19 24	A	1 44 W-
40413T	Cal for 40413			180sec	"						Dec D
40414	HD 37479	5 33.7	-2 39	G12	IIa-O-e	13/.5		19:25	21:04	B	323 W-
40414T	Cal step wedge for 40414-18			90sec	"			21:10	21:30		Lo
40415	HD 42087	6 3.7	+23 08	G12	"	18/.7		21:38	23:11	C	50 W
~~40416~~	~~HD 112028~~ *	~~12 48.4~~	~~+83 57~~	~~G12~~	~~IIa-OE~~	13/.5		~~23:23~~	~~00:36~~	~~A~~	
	* Contamination ≈ 10 counts from HD 112014 which was original star desired Tm										
40416	HD 112014	12 48.4	+83 58	G12	IIa-OE	13/.5		00:37	01:50	B	1.5 W
40417	HD 161321	17 [illegible]	+14 27	G12	IIa OE	13/.5		02:07	09:23	C	122E
40418	HD 151[illegible]6	16 43.7	-15 30	G12	IIa-OE	20/.5	39°F	04:27	05:11	A	0 22W

Dome Temp. 5
Focus 50
Dome Temp. 3

Dome Temp. 50°F H=65%

Focus 50-R

Dome Temp. 37°F 85%

Transparency Conditions Very good sl haze 278

Corona Extreme 3h

Pt Aurora 10h
Corona → 1:30 very bright

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
19 24	A	1 44 W	-2 27	3-5"	3.51	095 V	not fit Hor 5-5-5	SpBin-Bln	40/55	} At Far right of Box**	wk
		Dew Dig 4½ min @ 68°					No Dunk				
21:04	E	3 23 W	-2 26	2-4°	6.32	B3p	7-7-7	Bl&Si	200/70		gng
30			Looked at Saturn				Ast 100 Tour		Dew Dig	8 min @ 68° No Dunk	
23 11	C	5 0 W	+23 17	2-4°	5.98	B25 I66	6-6-6	Hy Comp	200/120	cloud	Fine sl gng
			+83 39	2-3	5.28	A2	7-7-7	Sp Bin Bln	200/70	cloud + aurora	
		—	Broken - shuttered any hour								
21 50	B	00 59 W	+83 39	2-3	5.81	A0	7-7-7	SpBin-Bln	200/60	more cloud & aurora	v sl wk
09 23	C	1 22E	+14 34	"	6.07	Am	777	Sp Bin-Bln	400/140	cloud "	v sl wk
25 11	A	00 21W	-15 26	3"	6.19	A3	6-6-6	Sp Bin-Bln	400/150		Fine
										Comet West still	
										visible each low	
										aurora with binoculars	
										(tail) Too	

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Em IIIa-J-e 03075 - 23036
IIa-O-e 28115 - 23036

Date Fri-Sat Mar 26-27/76 **Observer** Wtn -Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40419	HD 37468	05 33.7	-2 39	G12	IIIa-J-e	13/1.5	42°F	19:17	20:32	A	2.56W
40419T	Cal for 40419			180sec	"						
40420	HD 42087	06 03.7	+23°08'	G12	IIa-O-e	18/1.7		20:37	22:22	B	4.15W
40420T	Cal for 40420, 21			90sec	"						
40421	HD 86590	09 54.4	+25 02	G12	"	18/1.3	43°F	22:26	00:59	C	3.02W

Dome Temp. 46°F H 85%

Focus 65-R

Dome Temp. .....

Transparency Conditions ..... Very Hazy .....

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Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
20132	H	2 5.6 W	−2 27	3-10"	3.57	09.5V	20 G 1405 5-5-7	Spkin-Blk	200/240	thin cloud * Far right Box #1	v wk
		Dew D19	4½ min	68°F	N_2 burst	8 psi				*	
2:22	L	4.15 W	+23 16	3-5	5.98	B2.5V	7-7-7	Ha-Comp	200/125		v sl wk sl grng
		Dew D19	8 min	68°F	N_2 burst	8 psi					
0:59	C	3 02 W	+24 50	3"	7.91	dG5	6-7-7	Spkin-Blk	800/200	Cloud	sl wk splotchy

281

Em IIIa-J-e 03075-23036
IIa-O-e 28115-23036

Date Sun-Mon Mar 28-29/76 Observer Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40422	HD 60178/9	7 28.2	+32 06	G12	IIIa-Je	91.9	40°F	19:04	19:13	A	0 11E
40423	HD 37468	5 33.7	-2 39	"	"	131.5		19:16	19:37	B	2 08W
40424	HD 37479	"	"	"	IIa-O-e	"		19:38	20:49	C	3 20W
40424T	Cal for 40424-29			90sec	"						
40425	HD 42087	6 3.7	+23 08	G12	"	181.7		20:52	21:50	A	3 50W
40425T	Cal for 40422-23, 30, 31			180sec	IIIa-Je						
40426	HD 86590	9 54.4	+25 02	G12	IIa-Oe	181.3		21:52	00:20	B	2 30W
40427	HD 112014	12 48.3	+83 58	"	"	131.5		00:27	01:06	C	0 24W
40428	HD 112028	"	"	"	"	"		01 07	01:36	A	0 55W
40429	HD 121247	13 49.2	+42 41	"	"	91.5		01 41	4:22	B	2 40W
40430	HD 137422	15 20.9	+72 11	"	IIIa-J-e	91.9		4 27	5 01	C	1 50W
40431	HD 170,000	18 22.2	+71 17	"	"	91.5	33°F	5 5	5 36	A	0 35E

Dome Temp. 4
Focus 65
Dome Temp. 7

Dome Temp. 42°F H=80%

Focus 65-R

Dome Temp. 34°F H=90%

Transparency Conditions Excellent → sl Haze

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Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0 11E	+32 05	2-3	2	A1 V Am	no Filter 7-6-7	Brt star	40/140	ζ Gem A/B * At Eyepiece right Pos #2	sl str
2 08W	-2 25	2	3.51	09.5 V	7-6-7	Sp Bin-Blg	40/65	σ Ori AB *	Fine
3 20W	-2 26	2-3	6.32	B3p	8-7-7	He-Si	400/140	σ Ori E	Fine
Dew 8 min Dig at 3:00		Pt. bet	E wi	.7 durain	10 interval			TV OK "4" But is stopped working	
3 50W	+23 16	2-3	5.98	B2.5Ib	7-7-7	Hu Comp	200/140	some cloud *	Fine
Dew 4 min Dig at 3:00 F		N2 bet							
2 30W	+24 50	2-4	7.91	dG5	7-7-7	Sp Bin-Blg	800/230		Fine
0 24W	+83 39	2-4'	5.81	A0	7-7-7	"	200/75	N star of pair	Fine
0 55W	"	"	5.3	A2	7-7-8		200/77	S star of pair	Fine
2 40W	+42 27	2-4'	6.69	A1	8-8-8	Am-MR	400/180	Haze TV OK now?	Fine
1 50W	+72 02	2"	3.1	A3 II-III	no Filter 7-7-7	Brt Star	40/145 *		Fine but 3 nd
0 35E	+71 26	2-3'	9.18	Ap si	7-7-7	Sp Bin-Blg	40/50 *		sl wk

V83

IIIa-J-e 03075–23036
IIa-O-e 28115–23036

Date Fri-Sat Apr 2-3/76 **Observer** mor-Th **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40432	HD 40183	5 52.2	+44 56	G12	IIIa-J-e	9/1.9		19:12	19:22	A	1.59 W
40432T	Col for 40432			180sec	"						Level
40433	HD 86590	9 54.4	+25 02	G12	IIa-O-e	20/1.3	41°F	19:27	22:02	C	0.32 W
40434	HD 86590	9 54.4	+25 02	"	IIa-O-e	25/1.3		22:05	23:22	A	1.52 W
40434T	Col stop -1.0 for 40433-34				IIa-O-e	90sec					Level

Dome Temp.
Focus 65
Dome Temp.

Dome Temp. 42°F H=74%

Focus 65-R

Dome Temp. 38°F 97%

Transparency Conditions Very good - scat cirr clouds then

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
17 22	A	1 54 W	+45 05	2"	1.93	A2V	no filter 6-7-7	Brt Star	40/120	B Hur ** } AT Right box #5	Fine gng
		Dev 05046	D19 69°F	≈ 5 min	N² burst	.7 dur 10 sec	int			**	
22 02	C	0 32 W	+24 49	1-3	7.91	dG5	7-6-5	Sp Bin-Bk	800/160	some cloud * } Push	v sl wk
23 22	A	1 52 W	"	2-3	7.91	dG5	5-5-5	"	800/92	real cloud *	sl wk
		Dev 05046	D19 69°F	≈ 8.5 min	N² burst	.7 dur 10 sec	int			Lenticular ? *	

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Em No-0-e 03094-03046.

Date Jan 7-5 **Observer** [illegible] **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
[illegible]	HD 23862	3433	-23°51	G12	[illegible]	91.5	40°F	19:30	20:24	A	5 12W
40436	HD 75935	08 47.9	+27 18	"	"	131.3		20:32	00:25	B	4 10W
40436T	Cal for 40435, 36 41				"	90sec					
40437	HD112014	12 48.3	+83 58	G12	"	131.5		00:35	01:13	C	101 W
40438	HD124883	14 11.0	+28 12	"	"	131.5		01:20	03:54	B	217 W
40439	HD 151676	16 43.7	-15 30	"	"	18/1.5		4 0	4 52	C	042 W
40440	HD124897	14 11.1	+19 42	"	"	91.9		4 57	5 01	A	3 33W
40441	"	"	"	"	"	"		5 03	5 08	A	3 39W
40441F	Focus			"	"	9	39°F			B	

Dome Temp. 39°F 52% H

Focus 70-R

Dome Temp. 34°F 75%

Transparency Conditions Photometric

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Brt Aurora radiating from W NW 23h →

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	In Box #5 with Last plates REMARKS	Quality
0:24	A	5 12W	+24° 14'	2"-4"	5.1	138p	7-9-8	Gl Shell	200/80	Cut short (no light from TV screen)	Fine
0:25	B	4 10W	+27 09	2½-3'	9.35	G8V	7-7-7	Hd SSV	800/130		s/wk
		• Dev 05046 D19 @ 68°			8 min	N° 6 brst 17 dur 10 sec int					
1:13	C	1 01W	+83 40	2"-4"	5.81	A0	8-7-7	Sp Bin-Blu	200/60	some haze (aurora)?	Fine s/gray
3:59	B	2 17W	+28 00	"	7.22	A2	7-7-7	Am-MR	400/180	(strange aurora ↓ streaking)	v s/wk
4:52	C	0 42W	-15 27	2-3	6.19	A3	6-6-6	Ec/Bin-Blu	200/55	E-W elongat	s/wk
5:01	A	3 23W		"	1.29	K2	7-16	std vel	40/55	2 plates	Fine
5:07	A	3 30W		"		"	12-16	"	40/40	"	Fine
	B		in in/out				5/5	no filter			s/red

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* IIa-O-e 28115 – 23036
IIa-O-e* 28115 – 05046

MR

Date Mon - Tues Apr 5-6 /1976 **Observer** GL-Tn/But-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40442	HD 23862	03h 48m.3	+23° 31'	G12	IIa-Oe	91.5		19 38	20.50	A	5 41 W
40442 T	Cal step wedge for 40442-44				"	90sec					08 46
40443	HD 78209	09 01.8	+52 00	G12	"	91.5		20 59	21 08	B	0 41 W
40444	HD 100054	11 25.7	+60 15	"	"	131.4		21 15	23 44	C	00 55 W
40445	HD 106112	12 07.5	+78 10	"	IIa-O-e*	91.5	44°F	23 49	0 10	B	0 40 W
40445 T	Cal for 40445-47										
40446	HD 110951	12 40.6	+8° 13'	G12	"	91.5		00 18	00 59	C	00 56 W
40447	HD 128092	14 29.9	+43 27'	"	"	91.5		01 05	03 20	A	01 30 W
4	HD 137182	15 19.5	+10 54	"		131.5		03 27		B	

Dome Temp. 46°F H=57%

Focus 70-R −60R For 40417

Dome Temp. .....

Transparency Conditions very good scattered cloud

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0 50	A	5 41 W	+24 00	1-4"	5.1	B8p	7-8-8	Gl Shell	200/115		Fine
		05046	019 85mi @ 69°F	N²burst .7d/hr 10sec int							
1 08	B	0 41 W	+51 52	1"	4.2	Am	8-8-8	Am-MR	40/14		Fine very grng
3 44	C	00 55 W	+59 56	1"	8.0	A1	7-8-8	"	800/300		Fine
0 10	B	0 40 W	+77° 52'	1-2"	5.1	Am	8-8-8	"	200/70		Fine
		April 8	D190 67°F	8 min N²burst .7 sec 10 int end							
0 57	C	00 56 W	+ 7° 57'	2"	5.0	Am	8-8-8	"	200/70		Fine
1 ...		01 30 W	+43° 14'	2-4"	6.88	A2	8-8-8	"	200/90		Fine
		—	—	4"	7.19	A0	7-	"	400/	CLOUD	

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IIa-O-e 28115-05046

Date Tues-Wed Apr 6/7 1976 Observer Hd / Team-Th Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40448	HD103095	11 47.2	38 26	G12	IIaO	13/.3	43°	21 22	23 06	A	Eod
40448T	Cal for 40448-50			90sec	"						4pi8
40449	HD102494	11 42.7	+27 53	G12	"	13/.3		23:45	2 17	B	316W
40450	HD140913	15 41.1	+28 47	"	"	"	35°F	2 23	5 04	C	306 W

Dome Temp. 4
Focus 6
Dome Temp. 3

Dome Temp. 43°F H=60%

Focus 60-R

Dome Temp. 35°F H=90%

Transparency Conditions Scattered cloud

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
23 00	H	E 0 01	+38 00	3-4"	7.3	G5	7-7.7	Std Vel	800/140	TV works	Fine
		April 8	D19@67°F	8mm	.7sec	10s	interval				
2 17	C	3 16 W	+27 37	2"	8.26	G8 IV	7-7-7	SSV "	800/200	TV works	Fine
5 24	C	2 06 W	+28 42	2-3"	8.81	G0 V	7-7-7	"	800/176	"	Fine. Sl guiding

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IIaO-E 28115-05046

Date Wed-Thur Apr 7/8 76 Observer Gl Ri / But-Ri Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40451	HD 23862	03 43.3	+23°51'	G-12	IIaO-E	9/.5	40°F	19:42	21:02	A	06°00
40452	HD [illegible]	09 02.7	+63°55'	"	"	"		21:13	21 34	B	01 13W
40453	HD 95608	10 57.0	+20°43'	"	"	"		21:39	22 01	C	00°22E
40454	HD 93431	10 42	+06°52'	"	"	131.5		22:10	00 15	A	02 17W
40455	HD 134305	15 04	+12°52'	"	"	131.5		00:21	03 06	B	00 47W
40456	HD 158013	17 21.7	+57°05	"	IIaO-E	9/.5	32°F	03:13	05 06	C	00 39W
4045671	cal step wedge for 40451-56				IIaO-E	90 sec					4pm 9/76

Dome Temp. 3
Focus 6.0R
Dome Temp. 3

Dome Temp. 39°F 79%

Focus 60R

Dome Temp. 32°F 94%

Transparency Conditions Thin Cirrus

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
21 12	+	06"03W			5.1	B8p	7-7-7	G1 Shell	200/73		Fine
21 47		01 13W	+63 43	5"	4.29	Am	8-8-8	Am MR	40/14	T.V. worked	Fine
22 01		00"12E	+20 27	5"	4.33	Am	8-8-8	"	40/14	T.V. no worked	Fine
20 15	+	02 17W	+06 38	3-5	7.07	A2	7-7-7	S, Pan-Bk	400/150	" " "	Fine
03 06		00 47W	+12 44	3-5	7.24	A7	7-7-7	Ap MR	400/180	TV worked INT NOL! 51 4.4	Fine
05 01		00 34W	+57 07		6.61	A2	7-7-7	Am. MR.	400/160	NO T.V.	Fine
		April 8/76 Dew 19 @ 67°F N2 burst .7						of 10 min intervals			

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IIaOE 28115 - 28046
IIaF E 03075 14036

Date April 8/9 1976 Thurs Fri **Observer** Bl-Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40457	HD 38771	05h43.0	-09°42'	B-12	IIaO-E	9/.9	36°F	19:26	19:30	A	
40458	HD 37742	05h35.7	-02°00'	"	"	"		19:34	19:37	B	
40459	HD 37128	05h31.1	-1°16'	"	"	"		19:39	19:42	C	
40460	HD86590	09h54.4	+25°02'	"	"	20/.3		19:52	21:46	A	
40461	HD 112014	12h48m16s	+83°58	"	"	13/.5		21:57	22:30	B	
40462	HD112028	"	"	"	IIaOE	13/.5		22:35	23:03	C	
40463	HD112014	12h48m16s	+83°58	"	"	"		23:06	23:33	A	
40464	HD130841	14h45.1	-15°38	B-16	IIaF-E	13/.5		23:47	00:18	B	
40465	HD 135681	15h11m18s	-12°40	B-12	IIaO-E	20/.3		00:27	01:27	C	
40466	HD 135681	"	"	"	"	"		01:28	02:30	A	
40467	HD 135681	"	"	"	"	"		02:31	03:44	B	
40468	HD 167771	18h11m.6	-18°30'	"	"	20/.5		03:49	04:55	C	
40468A1	cal step wedge for plate 40464.				IIaF-E	5 min					
40468A2	cal step wedge for plates 40457 - 40463			B-65-69	IIaO-E	90 sec					
40469	HD 170000	18h22m.2	+71°17	"	"	13/.9	32°F	05:01	05:11	A	

Dome Temp. 3
Focus 7
Dome Temp.

Dome Temp. 33°F H=69%

Focus 75R

Dome Temp. 29°F 77%

Transparency Conditions Excellent

294

Ending Time EST	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		02"35W	-09° 30'		1.86	B0.5I	7-14	Spectrum Std	40/28		Fine
		02"49W	-01° 47		2.05	09.7I	#2-12	"	40/29		Fine sl guiding
		03" 00W	-01°05'		1.51	B0Ia	12 12	"	40/27		Fine
		00"39W	+24°48'		7.91	dG5	7-77	Sp Bri-Blu	800/200		Fine
		01"29E	+83° 39		5.81	A0	77-2	"	400/150	1) one & pair Bruster 3 pairs	Fine
		00"58E	+83° 38'		5.2	Shell	7-7 7	Blu-Shell	200/85	5 & pair	Fine
		00"25E	+83° 39'		5.81	A0	7-77	Sp Bri - Blu	400/191		Fine
		01"38E	-15° 46		2.99	Am	7-77 no filter 5-55	"	40/70	R H S & Box	Fine
		00"58E	-12° 47'		3.04	A2	7-77	Ed Bri-Blu	400/90		Fine
		00 07W	"		"	"	7-7-7	"	400/90	"	Fine
		0 7 22W	"		"	"	7-77	"	400/89		Fine
		00 27E	-13° 18'		6.63	[illegible]	7-7-7	Sp. Blu - Blu	400/160		Fine
		April 9 1976 DA @ 68°F			4½ min	N² burst .7 at 10 sec interval				R.H.S. & Box	
		April 9 1976 D19 @ 67°F			8 min	.7 at 10 sec intervals					
		00 17E	+71 25		4.18	A5	7-14	[illegible]	40/35		not standard at one end

Tau-E 2115-09046

Date APRIL 9-10 1976 Observer MOR-Ri / WA-Ri Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40470	HD 38771	05h43.0m	-9° 42′	G-12	IIaO+F	9/.9	38°F	19:33	19:36	A	
40471	HD 37742	05h35.7m	-2° 00′	G-12	IIaO+F	9/.9		19:44	19:46	B	
40472	HD 37128	05h31.1m	-1° 16′	G-12	IIaOE	9/.9		19:51	19:54	C	
40473	HD 30614	04h44.4m	66° 10′	G-12	IIaOE	9/.9		20:01	20:15	A	
40473.1	cal step wedge	40470 -	40473.		IIaO-F	90 sec					
40474	HD 119786	13h40.2m	-15° 16′	G-12	IIaOE	13/.5		0:46	01:46	A	
40475	HD 13568	15h11.3m	-12° 40′	G-12	IIaOE	20/.3		01:57	03:07	B	
40476	HD 151676	16h43.7m	-15° 30′	G-12	IIaOE	13/.5		03:16	04:17	C	
40477	HD 161321	17h39.7m	+14° 27′	G-12	IIaOE	13/.5	36°F	04:24	05:02	A	
40477.1	cal step wedge for plat 40474-77				IIaOE	90 sec					

Dome Temp.
Focus 302
Dome Temp.

Dome Temp. .....

Focus 70R

Dome Temp. 38°F 75%

Transparency Conditions good seeing but

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
9:36	A	2h46 W	-9° 40′		1,86	B0.5Ia	7-14	Spectr. Std	40/24	tel new	Fine guiding
4:44	B	2 58	-2° 00′		2.05	O9.7Ib	12-12	Spectr. Std	40/28		Fine sl guiding
9:54	C	03h15W	-01°16		1.51	B0Ia	12-12	" "	40/30		Fine sl guiding
0:17	A	04h22W	+66°15′		4.29	O9.5Ia	12-12		40/30	double	Fine sl guiding
		April 9 1976 D19 @ 67°F 8mm N2 brush .7 at 10sec intervals									
0:46	A	00h58W	-15°30′	2-3	6.15	A0	7-7-7	Sp. Bin-Bln	400/160		Fine
3:07	B	00h49W	-12°46′		7.0 -7.4	A2	7-7-7	Ecl. Bin-Bln	400/90	BROKEN 4 PIECES	Fine
01:2	C	00h27W	-15°29′		6.19	A3	7-7 7	Ecl. Bin-Bln	400/120		Fine
05:02	A	00h17W	+14°34′		6.07	Am	7-7 7	Ecl. Bin-Bln	400/150		Fine
		April 10 1976 8mm @ 68°F N2 brush .7 at 10m interval									

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IIaOE – 28115-09046

Date Sun Mon April 11-12 1976 Observer Hd-Ri Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
404778	HD65934	07"56 1	+26°55	G-12	IIaO-E	13/.3	32°F	19 38	22:04	A	
404779	HD102646	11 44.0	+28° 41	B-12	IIaO-E	13/.3		22:09	23:52	B	
404780	112 299	12 50 6	+ 26 16	"	"	13/.3		23 55	02:48	C	
404809 1	cal clip wedge + plate 4047		B-81		IIaO E	90m					
404781	HD149372	16" 32.0	+29°56	"	IIaO-E	13/.3	26°F	02:55	05:00	A	

Dome Temp.
Focus 90
Dome Temp.

Dome Temp. 30°F 66%

Focus 90R

Dome Temp. 22°F 68%

Transparency Conditions good

TV system does not work for beams

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2:09	A	03h07mW	26 50	3	8.87	G8III	7-7-7	List I Hd 55 V.	800/200	Field checks.	Fine
3:52	A	01h07mW	28° 22	2	8.55	K0III	7 7 7	List II Hd 55 V.	800/200		Fine
4:48	C	03h00mW	+26° 00		9.19	F8V	777	List II Hd 55 V	800/190		Fine
		April 12/76 8min @ 68°F N2 frost					7 of 10 sec intervals				
5:30	A	01h30mW	+29° 54'		8.90	F7II	7-7-7	List I Hd 55 V	800/150		Weak

297

Date Mon Tues April 12/13/76 Observer R: Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40482	40 78209	09 01 8	+52 50	B-12	IIaO-E	9/5	34°F	9:56	20:08	A	00 08W
4048241	red shyworge for 82				"	90 sec					4pl 4/7

Dome Temp.
Focus 90?
Dome Temp.

300

Dome Temp. .....

Focus 90R

Dome Temp. .....

Transparency Conditions .....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
20 08	A	004 08W	+51°47'		4.18	Am	8-88	Am-MR	40/14	clouds in	Fine
		April 12/76 8 min @ 68°F N2 Guid .7 at 10 sec intervals									

301

IIaO-E 28115-09046

Date Tues Apr 13-14/76 **Observer** Hd Ri / Ri Taam **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40483	β Vir HD102870	11 45.5	+2° 20'	G-12	IIaO-E	13/.3	+50°F	21 39	21 49	A	E 4m
40484	E Leo HD84441	9 40.2	+24 14	"	"	"		21 55	21 58	B	W 26
40485	HD 89449	10 14.3	+19 59	"	"	"		22 05	22 20	C	W 14
40486	HD 122693	13h 58.3	+25° 03	"	IIaO-E	13/.3		23:54	02:11	A	
40487	HD171232	18h 28m5	+25°25	G-12	IIaO-E	13/.3		02:17	04:06	B	
40488	HD 183399	19h 24.3	+25°14'		IIaO-E	13/.3	+45°F	04:11	04:59	C	
40488-1	cal step wedge for	40483-88			IIaO-E	90sec					

Done Temp.
Focus 40
Done Temp.

302

Dome Temp. .....

Focus 40 R

Dome Temp. 45°F 70%

Transparency Conditions Very poor

good after midnight

10 23:48

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	A	E 44m	+2° 03	2	4.16	F8V	7-7-7	Std Vel.	80/20	Set Sp. Foci.	Fine
	B	W1 26	+24 01	2	3.76	G0 II	777	" "	80/20		Fine but sp. shaky??
	C	W1 14	+19 44	2	5.3	F5	7-7-7	" " L.S.I	400/1200	Too poor for prog. *'s	Fine
	A	01m22W	+24°50'	3	8.74	F8I	777	Hd 5.S.U	800/200		VS/wk
	B	01m13E	+25° 35	3	8.66	G8III	777	" L.S.V.II	800/200		vs/wk
	C	01m15E	+29°30'	2-3	8.09	K1III	77-7	Hd 5 S.V.	800/240		s/wk

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IIa-O-e 28115-13046
IIa-Fe 03075-A036

Date Fri. April 16-17/76 Observer Mor/Kn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40489	HD 86590	9h 54m.4	+25° 02'	G12	IIaO-e	20/.3	70°	19:49	21:37	A	1 2W
40490	HD 86590	"	"	"	"	"		21:38	23133	B	3 0W
40490 T	Cal for 40489-90,92			90sec	"						
40491	HD 130841	14 45.9	−15 38	G12 .558 -24	IIa-F-e	13/.5		23:45	1 51	A	0 26W
40491 T	Cal for 40491			5min	"					r	
40492	HD 141458	15 44.1	+13 01	G12 .490B	IIa-O-e	9/.3	66°F	2:05	4 06	B	1 44W
	HD 161321	17 39.7	+14 21		IIa-O-e	13/.5		4:12		A	

Dome Temp.
Focus 10 E
Dome Temp.

Dome Temp. 80°F H=70% outside

Focus 10B −0

Dome Temp. 75°F H=80%

Transparency Conditions Hazy Lazy

* Push L at Far Right of Box #5

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
21:37	A	1 2W	+24 48	1"-2"	7.91	dG5	6-6-4	Sp. Bin.-Bln	800/165	* IR reading Broken 9pc. Dew by hand 8mi 665 ↓ IR reading Jump by 5 min East 9°58'6 → 9°59'1	
23:33	B	3 0W	+24 50	1'-3"	"	"	5-5-5	"	800/120	* haze - cloud	wk
										*	
1 51	A	0 26W	−15 46	2"-5"	2.89	Hm	no Filter 5-5-5	"	200/320	cloud } in middle Box #5	Fine
	C										
4 06	B	1 44 W	+12 55	1"-2"	68	A0	filter 7-7-5	"	800/165	* Focus To 0-P	s/wk
	F				6.07	Hm	filter 7-	"			

1

305

IIa-0e 28115–13046

Date Sat-Sun Apr 17-18/76 **Observer** B½-T½ **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40493	HD 38771	05 43.0	−9 42	G12	IIa-0-e	18/1.9	73°F	19 34	19:46	A	3.2W
40494	HD 37128	05 31.1	−1 16	G12	IIa-0e	9/1.9		19:51	20:07	B	3.9W
40495	HD 37742	05 35.7	−2 00	G12	IIa-0E	9/1.9		20:11	20 38	C	4.2W
40496	HD 30614	04 44.1	+66° 10′	"	"	9/1.9		20 46	22 03	A	3.6W
40496 T	Cal for 40493–40503			90sec	"						
40497	HD 11 014	12 48 16	+83 58	G12	IIa-0E	13/1.5		22 16	22 51	B	0.3E
40498	HD 141458	15 44.1	+13 01	"	"	13/3		23 02	00 08	A	2.2E
40499	HD 141458	15 44.1	+13 01	"	"	"		00 09	01 05	B	1.1E
40500	"	"	"	"	"	"	68°F	01 06	01 55	C	0.2E
40501	"	"	"	"	"	"		01 55	02 53	A	0.3W
40502	"	"	"	"	"	"		02 53	03 47	B	1.4W
40503	"	"	"	"	"	"	66°F	03 47	04 48	C	2.3W

Dome Temp.
Focus 10
Dome Temp.

Dome Temp. 79°F H=60%

Focus 10-B

Dome Temp. 68°F H=75%

Transparency Conditions Hazy - Fair

Ending Time E.S.T. P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
45 A	3 27W		1-2	1.86	BoSla	11-8	Sp. Std.	40*/23	Tel reversed	Fine sl grg
07 B	03 59 W	-1° 15'	1-2	1.51	BoIa	7-13	Sp. Std	40*/22	* Gain (Prob may have been 20	Fine grg
38 -	4 27 W	-1 59	2-3	2.05	09.7Ia	12-12	Sp. Std	40*/12	haze	Fine
03 -	36 40 W	+66 15	1-3"	4.33	9.7Ia	12-12	Sp. Std.	40*/≈290	cloud	vsl wk
51 B	0 32E	+83 37	1-2"	1.81	Ao	7-7-7	Sp Bin - Blw	400/145		Fine
03 A	02 12E	+12 56	1-3"	6.80	Ao	7-7-7	"	400/90	more cloud	Fine
05 B	01 15 E	"	"	"	"	7-7-7	"	400/90		"
55 C	0 25E	"	1-2"	"	"	7-7-7	"	400/93		"
53 A	0 33 W	+12 57	2"	"	"	7-7-7	"	400/95		"
47 B	0 129W	"	1-2"	"	"	7-7-7	"	400/90		"
48 C	0 2 30 W	"	1-2	"	"	7-7-7	"	400/90		Fine

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IIIa-0-e* 28115-18096 IIIa-0-e 28115-13046
IIa-F-e 03075-14036

Date Sun Apr 18:19/76 Observer Hd Tn/Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40504	HD 86801	9 55.8	+29 02	G12	IIIaOe	13/.3	74°F	19 50	00:04	A	3.35W+
40505	HD 130841	14 45.4	-15 38	G7B/6	IIa-F-e	13/.5		0 18	0 1 01	B	0.17E-
40505T	Cal for 40505			5 min	"						
40506	HD 132737	14 55.6	+27 33	G12	IIIaO-e	13/.3	70°F	1 18	4 4	A	2.38W+
40507	HD 141458	15 44.1	+13 01	"	IIIaO-e*	"		4 7	4 50	B	2.36W+
40507T1	Cal for 40507			90sec	"						
40507T2	Cal for 40504, 6			90sec	IIIaO-e						

Dome Temp. 8
Focus 10.6
Dome Temp. 6

"Waterloo"

308

Dome Temp. 82°F H-60%

Focus 10-B

Dome Temp. 67°F H=81%

Transparency Conditions some haze/clouds 20.00 -

*These to be pushed, at far right of Box 5

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00:09	A	3 35 W	+28 48	1"-2"-4	9.48	G0V	7-7-7	SSV List I	800/130	* N preceding of pair * in middle of box 5 ~ 11" N	s/wk
9:01	B	0 17 E	-	2"-8"	2.89	Hm	no filter 5-5-5	SpBm-Blg	40/70		Fine
4 4	A	2 38 W	+27 22	1"-3"	9.03	K0III	7-6-6	SSV list I	800/160	* Fld Fine checked N	s/wk
4 50	B	2 36 W	+12 57	2-3	6.8	A0	7-6-5	SpBm-Blg	400/≈50	* white * *	s/wk

40504 has flexure in comp. spectrum - perhaps due to long exposure, perhaps associated with hanging a chain on spectrograph to overcome instability of dewar about 2/3 way through.

307

IIa-O-e 28115 - 18046

Dome Temp. [illegible]
Focus 19.8
Dome Temp.

Date Mon-Tues Apr 19-20 /76 **Observer** MR-Th **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40508	HD 76216	$08^h\ 49.^m7$	$+58^\circ\ 36'$	G12	IIa-O-e	9/.5	70°F	19:50	22:57	A	3.6 W
40508T	Cal for 40508			90sec	"						

"Waterloo"

310

Dome Temp. 72°F H=70%

Transparency Conditions Hazy - Cloudy

Focus 10-B

Dome Temp.

* Push Dovely - (in Box #6) For Fig 44

Ending Time E.S.T	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2:17	A	3 36 W	+58 24	3"-4"	6.96	A2	8-67	Am-MR.	400/~~480~~ 86	* Field Check cloud	wk
										*	

IIa-O-e 28115-18096

Date Tues Wed Apr 20-21/76 Observer Tn/Tcam-Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40509	HD 78209	9 1·8	+52 00	G12	IIa-O-e	13/1·5	68°F	21 13	21 46	A	218 W
40509T	Col for 40509			90sec	"						
40510	HD 106117	12 7·5	+78 10	G12	"	13/1·5		21 54	23:10	B	037 W
40511	HD128092	14 29·9	+43 27	"	"	"		23 15	1 45	C	052 W
40512	HD 140913	15 41·1	+28 47	"	"	13/3		1 50	3 50	A	147 W

Dome Temp. 5
Focus 20
Dome Temp.

"Waterloo"

Dome Temp. 58°F H: 69%

Focus 20-R

Dome Temp.

Transparency Conditions Scattered cloud + haze

* Push (at Focus right of Box "6")

These pictures in Box "6"

3:12 s/cloud

Ending Time E.S.T. P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1 46	2 18 W	+51 52	2-3	4.18	Am	7-7-7	Am Std	200/90	haze	Fine
3 10	0 37 W	+77 53	2"-4"	5.11	Am	7-7-7	Am Std	200/70	cloud	Fine
1 45	0 52 W	+43 15	"	6.88	A2	7-7-8	Am-MR	400/175	cloud/haze	Fine
2 57	1 47 W	+28 42	2"-3"	8.81	GOV	7-5-5	SSV L+I	800/54	RA in reading went to ** Push	wk
			mistake	doing	just	star	– cloud	did	come	~~wk~~

313

IIaOe 28115 -18046

Date Fri-Sat Apr 23-24/76 Observer Wtn-Tn Julian Day 2..

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40513	HD86590	9 54.4	+25 02	G12	IIaO-e	30/13	52°F	20 03	22:42	A
40513T	Calib for 40513			90sec	"					
~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~G12~~	~~IIaO-e~~	~~9/9~~	~~[illegible]~~	23:06	~~[illegible]~~	~~B~~

Dome Temp. 5
Focus 45
Dome Temp.

Hour Angle End
02.3[illegible]
Dec 2
[illegible] H

Dome Temp. 53°F H=80%

Focus 45-R

Dome Temp. .....

Transparency Conditions Hazy

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	A	02:35 W	+24 51	2-3	7.9	dG5	5-5-5	5 Bia - Blu	800/110	cloud * Push } in Cy * } #6	wk
		Dew 12 min	DIM	Nr	burst	G	68°F 5-				
	G	W						Bet Star	40/	Clouded in	

315

Date Tues Wed Dec 27-28/76 Observer Ted Jim Julian Day 362

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40514	HD86801	23 41.5	-28 09	ST2	IIaO	13/13	41F	20 00	20 48	H	W

Dome Temp. 4
Focus 55
Dome Temp.

"Waterloo"

Dome Temp. 47°F H=82%

Transparency Conditions Cloudy

Focus 65-R

Dome Temp.

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		W	L8 46		9.48	60V	7	SSV tilt I	80	discarded	

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IIa-E 28115 18046

Date Wed Thur Apr 23/27 76 **Observer** Burt-R.L **Julian Day** 52

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40517	HD 110951	12 40.6	+1° 0'	G 12	IIa-O-E	91.5	48°F	23:14	23:57	A	0°40
40515	HD 124[illegible]	14 11.0	+21° 12'	"		131.5		00:00	02:54	B	0°40
40515-1	cal clip wedge				IIa-O-E	9200					Dw Bm
40516	HD 158013	17 21.1	+57 05'	G 12		131.5	44°F	02 59	04 21	C	1°40

Dome Temp. 48°F 71%

Focus 50R

Dome Temp. 43°F 72%

Transparency Conditions GOOD

exposed Box #6

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		01h24m	+09°52'	5"	5.0	Am	8-8-8	Am SH MR	20m/70		Fine
		02h52m	+27 53	5"	12.2	A2	7-7-7	Am MR	40m/180		Fine
		Dew 8 min Dig @ 03h			Nebulosity						
		01 14W	+57°07	5-6	6.61	A2	7-7-7	Am MR	40m/180		Fine

319

IIaO E 28115 18046
IIaOE* 28115 19046
IIaF-E

Date Thu Fri April 29/30 1976 **Observer** RE-RI **Julian Day** 8.6^45

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40517	HD86590	09h34m24s	+25°02'	G-12	IIaO-E	20/.3	52°F	20:05	21.40	A
40518	HD112014	12h48m16	+83°58	"	IIaOE	13/.5		21 47	22:16	B
40519	HD86590	09h54m24	+25°02	"	"	20/.3		22:25	00.15	C
40520	HD130841	14h45 4	-15°36	G-76	IIaF-E	13/.5		00:30	00.50	A
40521	HD135681	15h11m18s	-12°40	G-12	IIaO-E	20/.3		01:00	02:24	B
40521/1	cal step wedge				IIaF-E	5 min				
40521/2	cal step wedge	for plates 40517 - 19 + 21			IIaO-E	90 sec				
40522	HD151676	16h43m47s	+15°30'	G-12	IIaO-E*	13/.5		02.35	03:35	C
40523	HD167771	18h11 6	-18°30'	G-12	IIaO-E*	20/.5		03:40	04:.35	A
40524	HD170000	18h22m12s	+71°17	G-12	IIaO E*	13/.9	45°F	04:35	04:43	B
40524/1	cal step wedge	plate 40522 - 24			IIaO-E*	90 sec				

Dome Temp.
Focus
Dome Temp.

Hour Angle End

Dome Temp. 50°F 53%

Focus 402

Dome Temp. 420F 66%

Transparency Conditions excellent

320

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 57W	+24 41	2-3	7.91	dG5	~~6~~ 6 7	Sp Bu-Bl	800/200		Fine
01 39W	" "		5.81	A0	7-7-7	Sp Bu-Bl	400/140		Fine
04m34W	+24 41		7.91	dG5	6-6-6	" "	800/170		vs/wk
00m16W	-15° 55'		2.89	Am	no filter 5-5-5	" "	40/70	R.H.S.	Fine
01m30W	-12° 55'		7.0 7.4	A2	66 6	Fal Bu-Bl	400/90	cirrus clouds for a while	Fine
Dav DM	4½m @ 09°F		Ds burst					R.H.S	
" "	9 mm	"	"	"					
01m00W	-15° 36	2-3	6.19	A3	7 7 7	Fal Bu-Bl	400/140		vs/wk
00m32W	-15°2[illegible]		6.63	G7III	66-6		400/140		Fine
00m37W	+71° 18'		4.4	ApSi	7 7 4	Sp Bu-Bl	40/35	nt dawn	s/gng

321

Mag 1

Date Fri-Sat Apr 30/76 **Observer** Tu-Wt **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40525	VGEM #04710S	6 31.9	+16 29	GI2	IIIa-J-c	91.9		22:31	23:02	A	0.5 W
40525T	Calib for 40525				"	180sec					

Dome Temp.
Focus
Dome Temp.

322

Dome Temp. 60°F 60?

Focus 42-R

Dome Temp. 76?

Transparency Conditions Cloudy

Put in box with broken plate of Apr 16-17

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
05 45W		3-4?	1.93	A0 IV	n.g. 1 star 5-13	-84	300/??	Y motor running ≈ 5 sec lag	V.V. weak
Dew	Dig @ 62°F	5 mi	Nelson+					Cloud	
								I noticed massive	
								Aurora between clouds	
								Sunday night 11 PM	
								May 2	

323

Date Jun-Jun 1976 May 3-4 **Observer** MR-Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40526	HD 121247	13 49.2	+42 41	G-12	IIa-Oe	9/.5	45°F	20:53	01:00	A
40526R	cal slips wide				IIaOe	90 sec		2~~0~~		

Dome Temp.
Focus
Dome Temp.

Hour Angle End
2h

Dome Temp. 42°F 75%

Transparency Conditions Cloudy

Focus 60R

Dome Temp. 38°F

expose ← 6

Ending Time E.S.T. P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
9 14	10 3 W	+42° 15′	5″	6.69	41	8-8-8	Am-dd	400/140	clouded in	Flexure sl. weak
	Dev 8 mi (α	6.5	F	D19	W2	6 mm				

325

Tues-Wed

IaO-E 28115-19046

Date Tues. May 4-5/16 Observer RL Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40527	HD 86801	9 55.8	8° 02	G12	IIaD	15/.3	45°F	20 08	23 40	C	1 1/4
40525	HD 132737	14 57.6	27 33	"	"	13/.3		23 17	02:28	B	
40528	cal obj, wedge on plate	40 527 - 29			IaO E	90 sec					
40529	HD 190918	20h 02.2	+35° 31	G-12	IaO E	13/.5	45°F	02:49	04:10	C	

Dome Temp. 50°F 67%

Focus 60R

Dome Temp. 300F 80%

Transparency Conditions Lazy

exposure 6

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
3 45W	-28 44	2	9.49	G5V	777	SSV 4x1 I	8m/10z		Weak
824 05W	-27°18'	2	9.03	K0 III	7-77	"	500/200		Fine
Dew 68°F DH	IRm	Nebul.							
21h20E	+35°45	2	7.60	WN4.5 09.5Ia	777	Sp Bm-Bk	300/155	wrong star at first so change the plateholder lazy getting thicker during the exposure then clouds	weak
								Warren: overdevelop the night plates	

327

Em IIIaJ-e 03075-05046
IIa-Oe 18115-19046

Date Fri-Sat May 7-8 1976 **Observer** Mor-Tu **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40530	HD130841	14^h 45.4	−15° 38′	G8	IIIaJ-e	9/7	38°	22:38	00 33	A	030W
40530T	Cal for 40530.			180sec	"						
40531	HD151676	16^h 47.7	−15° 30′	G12	IIaOe	18/5		00:44	1 39	B	022E
40532	HD190918	20^h 02.2	+35° 31′	"	"	18/5		01:49	3 42	A	135E
40532T	Cal for	40531,32,33		90sec	"						
40533	HD161321	17^h 39.7	+14° 27	G12	"	13/5	37	3:46	4 25	B	12W

Dome Temp.
Focus
Dome Temp.

"Waterloo"

Dome Temp. 43°F H=96%

Focus 60-R

Dome Temp. 40° H=91%

Transparency Conditions cloudy but clearing ?? 328

* ~~Right~~ Box

Ending Time EST.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
10 33	A	0 30W	-15 50	2-4	289	Am	20th Mer 11-12-12	Sp Bin-Bln	40/170	* WRONG Grating tilt	
			Dew Dis	4½ min		N2 purge		68° F		*	
1 39	B	0 22E	-15 32	2-3	6.19	A3	7-6-6	Ecl. Bin-Bln	400/100	veiled → gauze	slant
3 42	A	1 35E	+35 48	2-4	7.60	WN4.5 09532	6-6-6	Sp Bin-Bln	800/450	veiled	slant
			Dew Dis	8 min		N2 purge	68°F			Console Doc reading failed	
4 35	B	1 30 W	+14 30	2-4	6.07	Am	7-7-7	Ecl. Bin-Bln	400/110	Down a bit in center	
										T Bruten 2pc	

329

2 Large visiting groups 2.5 hrs

2815 – 19046

Date Sat/Sun. May 8/9 Observer CM /TN Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
4053A	HD 126202	15h 14.2	+2 09	G-12	IIa-O	13/5		22:42	01:10	A	0 43 W
4053A F	Focus	Test		"	IIa-J	13				B	

a.k. "Waterloo"

330

Dome Temp. 50°F H=88.0

Focus 60-R

Dome Temp. .....

Transparency Conditions Clearing in

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
9:12	1	0-43 W	+1 58	2"	5.6	F8T	7-11	Wide Visible Color	400/50	Cloudy Push if possible	wk
	1		in 1 pt on 1				25/25	no filter		Dew 12 mi @ 68°F D 19 No Wind	

2m1

★ 28115-08056

IIIa J-c 0307-05046

Date 9/10 May 1976 Sun 11pm **Observer** B/h-Th **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40535	HD 112014	12h 48m 16s	+83° 58′	G12	IIIa-OE*	13/15	55°F	20:11	20:40	A	
40536	HD 112028	"		"	"	"		20:41	21:06	B	
40537	HD 118 246	13 30.5	-05 39′	G12	"	20/15		21:14	23:42	C	
40537T	Calib for 40535	-37, 39-40.		90sec	"						
40538	HD 130841	14 45.4	-15° 38′	G8	IIIa-JE	9/17		23 51	00:37	A	
40538T	Calib for 40538, 41-43.			180	"						
40539	HD 167771	18 11.6	-18 30	G12	IIIa-OE	17/15		00:46	02:14	B	
40540	HD 190918	20 02.2	+35 31	"	"	"		2 22	03 30	C	
40541	Vega HD 172167	18 33.6	+38 41	"	IIIa-JE	9/17		3 35	3 37	A	
40542	"	"	"	"	"	"		3 38	3 47	B	
40543	170 000	18 22.2	+71° 17′	"	"	B/15		03 51	4 16	C	

Dome Temp.
Focus 3
Dome Temp.

Dome Temp. 61°F H=71%

Focus 35-R

Dome Temp. 53° H=83%

Transparency Conditions Excellent

332

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
49		01 17E	+83° 34'	2	5.91	A5	7-7-7	Sp. Blu-Blu	200/160	good Fe	sl wk
		00 50E	"	1-2	5.2	B8	7-7-7	Shell Blu	200/80	good Fe	v sl gng Fine
34	C	01:02 W	-5° 56'	2"	7.90	B8?	6-7-5	Sp. Blu-Blu	800/320	sl wk Fe	v sl wk
		Dew D19	8 min @ 68°F	N2 burst							
37	C	042 W	-15° 50'	1-2	2.89	Am	7-7-7 not Hor	Sp. Blu-Blu	80/400	*	Fine
		Dew D19	4½ min @ 68°F	No burst						*	
14	B	107E	-15° 20'	2"	6.63	A7 III	6-6-6	Sp. Blu Blu	400/160	good Fe	gng v sl wk
30	C	0140 E	+35 49	2'	7.6	WN-1.5 09.5	6-6-6	"	800/480	sl wk Fe	gng sl wk
37	A	0 4E		1-2	0.1	A0	7-14 not Hor	Sp. Std.	40/70	*	sl gng Fine
42	B	0 06W		1	"	"		"	40/232	X	Strong
16	C	0050 W	+71 23	2"	1.18	Ap	5-5-5	Sp. Blu-Blu	40/60	sl wk Fe	Fine

333 Polar Axis Realigned for 3 hrs

E.O.C 28115-08056

Date 12/13 May 1976 Wed-Thurs. Observer But Th Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40544	HD 124843	14 11.0	+25 12	G12	IIaO-E	13/.5	47°	23 29	2 20	A	3 13 W
40544T	Co. to for 40544-45			90sec	"						
40545	HD 158013	17 21.7	+57 05	G12	IIaO-E	9/.5	43°	02 26	04 06	B	0 51 W

Lowered polar axis 3 flats on altitude screws
Moved polar axis 4 flats E on azimuth screws
This corrected results from last fall's realignment when the axis was raised 6 flats (= 1 turn) and no azimuth adjustment was made.

Dome Temp. 50°F H=65%

Focus 50-R

Dome Temp. 44° H=82%

Transparency Conditions Photometric

334

Reading Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2 20	A	3 13 W	+27 56	2"-3	7.11	A2	8-7-7	.1m MR	400/180	No Systematic dec drift	very wk Fe Fine
	B	01 51 W	+57 04	2"-4"	6 61	A2	8-8-9	.1m MR	400/180	No dec drift. very stable	slightly wk Fe Fine

335 Durham College Visitors Night at Solar 06hr

IIaO-e 2815-08056
IIIaJ-e 0325-05046

Date Thurs-Fri 13-14 MAY '76 Observer MOR-TN Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40546	HD 112014	12h 48m.3	+83° 58′	G12	IIaO-e	13/.5		20:46	21:40	A	0 0W
40546T	Cals for 40546, 49-51.			90sec	"						
40547	HD130841	14h 45.4	−15° 38′	G.8	IIIaJ-e	9/.7	52°F	21:52	23:08	C	0.31E
40547T	Cals for 40547, 48.			180sec	"						
40548	HD116656	13h 19m.9	+55° 27′	G12	IIIaJ-e	9/.9		23:35	23:50	A	1 38W
40549	HD116657	"	"	"	IIaO-e	9/.5		23:52	00:01	B	0 49W
40550	HD161321	17h 39m.7	+14° 27′	"	IIaO-e	13/.5		00:10	1:09	C	1 24E
40551	HD170000	18h 22m.2	+71° 17′	"	IIaO-e	9/.5		01:17	1:46	A	1 30E

Dome Temp. 52°F H=80%
Focus 50-R
Dome Temp. 47°F H=80%

Transparency Conditions Cloudy mainly
stars jumped to holes

Reading Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1 49	A	0 0 W	+8334	2-3"	5.81	A0	8-77	Sp. Bin-Bln	400/160		Fine
										near full Moon; cloud	
3 28	C	0.31 E	-15 52	2-8"	2.89	Am	no filter 7-7-7	Sp Bin-Bln	40/110	* * A1 Far right Lac = I	Fine
										*	
3 50	A	1 38 W	+55 04	2"-4"	2.27	A2V	no filter 6-6-6	Sp Bin-Bln	40/107	* slwkfe	vsl gng sl strong
0 01	B	01 49 W	+55 03	"	3.96	Am	7-7-9		200/70	slwkfe	Fine
1 09	C	1 24 E	+14 28	"	6.07	Am	7-7-7	Ecl. Bin. Bln	400/155	more cloud wkfe	slwk
1 40	A	1 30 E	+7120	"	4.18	Ap Si	8-12	Sp Bin Bln	200/22		wk

337

IIa O-E 28115-08056

Date Tues-Wed May 18-19/76 **Observer** Nd McW Tm **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40552	HD 90861	10 24.3	+2° 05	G12	IIaO	13/.3	43F	20 30	23 10	A	4.2 W
40552T	Calib. for 40552-54			90sec	"						
40553	HD 135364	15 09.6	+48 51	G12	"	13/.3		23 18	1 43	B	2.1 W
40554	HD 186547	19 39.9	+13 04	"	"	13/.5		1 51	2 38	C	1.3 E

Dome Temp. 4
Focus 5
Dome Temp.

Dome Temp. 47°F H. 90%

Focus 50-R

Dome Temp. 43 H= 98%

Transparency Conditions Very good SW Haze

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0910	A	4 12 W	+28 44	2-4	8.4	K2 III	7-8-7	SSV [illegible] I	800/200	some cloud	Fine
1 43	B	2 1 W	+48 40	2 3	8 2 2	K2 III	7-8-7	[illegible]	800/200	[illegible]	Fine
2 33	C	1 35 E	+13 18	2-4	6 1	B8 IV	7-8-7	[illegible]	400/150	Cloud	Fine

339

IIa0-e 28115-08056

Date Wed. Thurs 19-20/76 (Mog) Observer MKW-Ta Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40555	HD 171232	18 28.5	+25 25	G12	IIa0-e	13/.3		23 37	2 5	A	0.53E+
40555T	Calib for 40555-56			90sec	"						
40556	HD 171767	18 31.5	+4 52	G12	"	13/.5	47°F	2 8	3 53	B	0.53W+

Dome Temp. 45
Focus 50
Dome Temp. 45

340

Dome Temp. +52° H=65%

Focus 50-R

Dome Temp. +52° H=70%

Transparency Conditions Clouds, Haze & Frost very gusty from NNW Good Aurora

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
25	A	053E	+2532	2-4	8.7	G8III	7-8-7	SSV-Hd	800/200		Fine
										Console Dec & RA failed ↓	
353	E	053W	+4 59	2-3	7.39	K0III	7-97	Vis Bin-Hd	400/121	some cloud	Fine

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IIaF 28115-17056
IIIaF 03075-05246

Date 20/21 May 1976 Thu/Fri Observer R. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40557	HD 118246	13h 34m.1 (1970)	-06°01' (1970)	G12	IIIaF	29/.5	60°F	20:25	22:45	H	16h 50m
40558	HD 130841	14h 45m.4	-15°38'	G8	IIIaF	9/.7		23:10	23:55	B	
40559	HRP 226868	17h 3/4m	+34°56	G12	IIaF	25/.3	55°F	00:20	04:00	C	
40559	cal step wedge				IIaF-E	1 Pmm					
40559	cal step wedge				IIIaF	90 mm					

Dome Temp.
Focus
Dome Temp.

Dome Temp. 65°F 60%

Focus 302

Dome Temp. 55°F 78%

Transparency Conditions good

342

Ending Time E.S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
23:45	14	20h 30W	-06° 00'	2-3	7.90	138c	6-66	Sp. Blu-Blu	800/322	clouds	Fine
3:55	B	20h 14W	-15° 54'	3	2.89	6m	7 7-7	"	40/111	2 IIIS	sl weak
		20h 8E	+35° 10'	3-4	9.74	097	666	"	800/210		sl weak
										P IIS	
										2 nice plan nebulosity	
										2 I.. plate	

343

FCOF 2015-17056

Date Fri May 21-22/76 Observer Ri - Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
40560	102 494	11 42 7	+27 53	G12	IIaO	13/.3	55°F	20 30	22:52	A
405609	cal slap wedge									

Dome Temp.
Focus
Dome Temp.

Hour Angle End

"Waterloo"

344

Dome Temp. 56 F 76%

Transparency Conditions .....

Focus 402

Dome Temp. .....

Ending Time E.S.T. P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	02h 47m W	+27° 30'	3"	83	F8V	1-77	SSV List I	800/187	cloudy	Fine
		D-19 8mm @ 68°F NW breeze, 7 at 10 sec interval								

345

IIaoF 2405-17056

Dome Temp.
Focus
Dome Temp.

Date Sept 2a May 22-23 1976 **Observer** Wendell OM - R. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40561	HD 107341	12h 15m.4	+38° 28'	G 12	IIaO.E	.3/.5	54°F	20:30	23 11	A	
40562	HD 135364	15h 09m.6	+48° 57'	G 12	IIaO.E	13/3		23:15	03:35	B	
40563	HD 174897	18h 47m.8	+14° 25'	G 12	IIaO.E	B/2	46°F	02:32	03:28	C	
40564	cal sky: wing for plate 40561-62				IIaO.E	90sec					
40565	cal sky: wing for plate 40563				IIaO.E	45sec					

"Waterloo"

Dome Temp. 54°F 78%

Focus 40R

Dome Temp. .....

Transparency Conditions excellent

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		00+39W	+38°03'	1	7.8	K0III	7-7	Wide Vis Kron Baker	800/400		fine
		03"..W	+48°41'	"	8.7	K2III	7-7	"	800/230	Weak Fe	v s/wk
		00"55W	+11°33	"	7.6	K0III	7-14	"	800/105	[illegible]	s/w f
			8mm @ 68°F D.19			N_2 bmp 7 @ 10		see interval			
		Dew	12 m 69°F D19			N_2 5 m.+.7		at Wee int.		with f Dew	

Dew 12 m 69°F D19 N_2 5 m.+.7 at Wee int.

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IIIa J.E - 03095 - 05046

BB

Date 23/24 May 1976 **Observer** **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40564	HD 112028	12 [illegible]	+83° [illegible]	G12	IIIa OE	9/5		20:32	21:11	A	
40565	HD 130841	14 [illegible]	-15° [illegible]	G5	IIIa-J E	9/7		21:25	22:44	B	
40566	HD 135741	14 55.6	-8 05'	G5	IIIa-J E	9/5		22:47	00:13	C	
40567	4D 172167 2 tyk	18 33.4	+38 41	G12	IIIa J E	9/9		00 22	00:24	A	2.22E
40568	"	"	"	"	"	"		00 25	00:30	B	
40569	HD 190918	20 02.2	+32 31'	G12	IIIa OE	20/5		00:36	02 21	C	
40570	HD 130910	14 [illegible]	+31 17	G12	IIIa J E	9/5		02 27	02 54	A	
40571	cal strip [illegible]	[illegible] 40565, 67, 68, 70-72			IIIa J E	180 sec					
40572	cal strip [illegible]	[illegible] 64, 66, 69			IIIa J E	90 sec					
40573	HD 217675	22 57.3	+41 42	G12	IIIa J E	9/9		0300	03:38	B	
40574	HD 199629	20 52.5	+40 47	G12	IIIa-J E	131.5		03 41	04 01	C	

"Waterloo"

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Dome Temp. 55°F H=72%

Transparency Conditions Good

Focus 40R

Dome Temp. 52°F 95%

Spectral Box #3

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		00 10W	+83° 32'	3-4	5.2	Sh. V	7-7-7	Shell-Bln	400/17		Fine
		00 15E	-15° 54'		3.89	Am	7-7-7	Sp Bln-Bln	40/150	R.H.S. s/Fog	Fine
		01 23W	-08° 23		4.91 -5.9	AOI	7-5-11	Sp. Bln. - Shell	80/48		Fine
		2 22E			0.1	A0	8 8	Sp Bln	40/35	wk Fog	v s/wk
		02 16E	+38°46°		"	"	8-8	"	40/157		S Thing
		01 53E	+35°45'		7.61	WHT	6-6-6	Sp. Bln - Bln	200/620		Fine
		00°23W	+71°19'	2-3	4.18	A5	5-5-5	Sp. Bln-Bln	40/72	R.H.S	Fine s/str
		8 min	@ 68°F	D-19	N² brn	9.7	10 sec	interval		R.H.S	
		4½	" "	"	"	"	"	"			
		03-32E	+20°14'	3	3.63	B6p	5-5-5	steel Bln	40/119	R.H.S	Fine s/str
		01 05E	+41°05		3.96	A5	5-5	Sp Bln Bln	40/72	R.H.S	Fine s/str

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D.O.e 38115-17056

Date 26/27 May 1976 Wed Thurs Observer But. Ty Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40573	HD 128092	14 27.9	+43 27	G12	IIa-0-e	91.5	57°F	20 35	23 04	A	
40574	HD 135679	15 11.3	+26 01	"	"	"		23 12	01 06	B	
40574 T	Cal. Sp 40573-76			Plesc	"						
40575	HD 151702	17 14.7	+18 56	G12	"	131.5		01 10	03 4	C	
40576	HD 170 000	18 26	+71 17	"	"	91.5	55°F	03 09	03 23	A	

Dome Temp.
Focus
Dome Temp.

"Waterloo"

Dome Temp. 63° 30°

Focus 30-R

Dome Temp. 60 90°

Transparency Conditions Thin Cloud → Good

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Reading Time E.S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	A	00h 38W	+43° 09'	2"	6.88	A2	8-9-8	Am - MR	400/180	Cloud	Fine
	B	01h 53W	+25 47	1-3"	6.67	B9	8-9-8	Ap - MR	400/180		Fine
		Dew D[illegible] 8 min		N_2 Burst	69°F	.7	burst @ 10 sec int.				
3 4	C	1 44W	+18 56	2"	7.48	A0	7-8-7	Am MR	400/180		Fine
	A	01 00W	+71 21	1"	4.18	A2	8-9-8	Spec - Ha	40/15		Fine Slurg

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IIIaJ-e 03075-26056
IIaO-e 28115-24056

Date 27/28 MAY 1976 Thurs-Fri **Observer** MOR-TN **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40577	HD130841	14h 45m.4	-15°38′	G-8	IIIaJ-e	9/1.7	63°	20:50	21:48	B	0 58 E
40577 i	Calib for	40577, 82,83,86		180sec	"						
40578	HD141458	15 44.1	+13 01	G8	IIaO-e	9/1.3		21 55	23 49	C	0 07 W
40578T	Calib for	40578-81,84,85		90sec	"						
40579	HD207330	21 43.1	+48°51′	G12	IIIaJ-e	18/.9		00:06	00:14	A	5 26 E
40580	HD190918	20 02.2	+35°31′	"	IIIaJ-e	18/.5		00:20	1 50	B	2 09 E
40581	HD207330	21 43.1	+48°51′	"	"	18/.9		01:55	2 02	C	3 38 E
~~40582~~	~~HD161321~~	~~17h 39.7~~	~~+44°27′~~	"	"	~~13/.5~~		~~02:08~~	02:	A	
40582	HD172167	18 33.5	+38 41	"	IIIaJ-e	9/.9		02:26	02:32	B	0 08 W
40583	"	"	"	"	IIIaJ-e	"		02:33	02 35	C	0 15 W
40584	HD207330	21 43.1	+48 51	"	IIIaJ-e	18/.9		02:44	02:58	A	2 43 E
40584F	Focus Test			"	"	18				B	
40585	HD207330	21 43.1	+48 51	"	"	18/.9		03:04	03 18	A	2 22 E
40586	HD217675	22 57.3	+41 47	"	IIIaJ	9/.9		03:23	03:54	C	3 01 E

Dome Temp. ...
Focus 15 A
Dome Temp.

"Waterloo"

Dome Temp. 70°F 4:70?

Focus 15 R

Dome Temp. 60°F N 85%

Transparency Conditions Some haze

Ending Time E.S.T	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
21-46	B	0 56 E	−15 53	2"	2.89	A_m	7-7-7	Sp. Bin-Bln	40/124	RHS low ☐2 ?? Prob at least 150 cam. shake	sl wk & gag sl
		Dr 4½mm		DIS	N_2 burst				BHS	Exp motor partially out of focus!	
3 49	C	0 07W	+12 51	1"	68	AO	10-5-10	Sp Bin-Bln	400/160		Fine
		Dr 8mm		DIS	N_2 burst		Q 63° F				
4 14	h	5 26 E	+49 13	2"	4.08	B2.5III	6-6-6	Hα-Comp	40/30		Fine
1 50	B	2 09E	+35 44	1"	7.6	WN4.5+ OB.5Ia	6-6-6	Sp Bin-Bln	400/300	start Fe	Fine
2 02	C	3 38E		1"	4.08	B2.5III	6-6-6	Hα Comp	40/30		Fine
2	A	~~+14 26~~		~~1"~~	~~6.07~~	~~Am~~	~~7-~~	~~Sp Bin-Bln~~	~~400/~~	~~H~~ cloud coming!	
1 36	B	0 02 W	+38 46	1"	0.1	AO	6-12	Sp Std	40/150	Vega RHS	fair gray
2 35	C	0 05 W	+38 46	1"	"	"	9-9	"	40/40	" RHS	wk gray
2 58	A	2 42E	+49 12	2"	4.08	B2.5III	6-6-6	Hα-Comp	40/30		Fine
	B	in/out of					7/3	no filter			
3 18	A	2 22E		1-½"	4.08	B2.5III	6-6-6	Hα Comp	40/30	Somewhat	Fine gray
4 39	C	3 01E	+42 13	1"	3.63	B6p	no Filter 6-7-7	Shell *, Bln	40/60	RHS more cloud	v wk

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Date 28/29 May 1976 Friday Observer D.W.T. Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
40587	HD 89025	10 11 08	+23 55	G12	IIIa-J	9/mm	6.5°	20 30	21 11	A	3 Hours
40587T	Calib for 40587			90sec	"			-			
40588	1D172167	18 335	+38 41	G12	"	9/9		21 18	21 32	B	45E
40589	"	"	"	"	"	"		21 33	21 37	C	45E
40589T	Calib for 40588-89			180sec	"						

Dome Temp. 43
Focus 10R
Dome Temp.

"Waterloo"

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Dome Temp. 67°F H=70%

Transparency Conditions Hazy → cloudy

Focus 10R

Dome Temp. .....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
21 11	A	03 06W	42 33 35	2"	3.74	F0 III	7-7	B-t star	40/43	Over developed !? RHS	wk
			Dew 6 min D 19			N2 bubbled 7 dry units @ 68°F				Over developed !? box #3	
21 32	A	4 55 E			0½	A0	7-14	Sp Std	40/208	Some cloud	
21 37	C	4 50 E			"	"	10-½	"	40/78		
			Dew 4½ min D 19			68°F N2 bubbled 7 dry units					

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Date..... Observer..... Julian Day.....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.

Rokos "Waterloo"

3.58

3.56

Ending Time E.S.T.	P.F

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